

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER**

Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route; that I am familiar with the conditions which recently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the proposed operations herein will be performed by Pendragon Energy Partners, Inc., its contractors and subcontractors, Pendragon Energy Partners, Inc. will operate the lease under Flood & Peterson Federal Bond #RL B0001759. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

5. Lease Serial No.
UTU77407

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
Federal #9-17-10-18

9. API Well No.
43-047-34135

10. Field and Pool, or Exploratory
Exploratory - wildcat

11. Sec., T., R., M. or Blk. and Survey or Area
**NE-SE Sec 17, T10S, R18E
S.L.B. & M.**

12. County or Parish
Uintah

13. State
Utah

1a. Type of Work: ☒ DRILL

☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name Of Operator
Pendragon Energy Partners, Inc.

3a. Address
621 17th Street, Suite 750, Denver CO 80293

3 b. Phone No. (include area code)
303 296 9402

4. Location of Well (Report location clearly & in accordance w/State requirements*)
At Surface **752' FEL, 1,804' FSL, Sec 17-T10S-R18E S.L.B.&M.**
At proposed prod zone **Same**

**4421634N
593104E**

14. Distance in miles and direction from nearest town or post office *
29.7 miles from Myton, Utah

15. Distance from proposed* location to nearest property or lease line, ft.
(Also to nearest drlg. unit line, if any)
752'

16. No. of Acres in lease
40

17. Spacing Unit dedicated to this well

18. Distance from proposed location to nearest well drilling, completed, applied for in this lease, ft.

19. Proposed Depth
5,000'

20. BLM/BIA Bond No. on file
RLB0001759

21. Elevations (Show whether D, KDB, RT, GL etc.)
5,281' GL

22. Approximate date work will start*
Aug 15, 2001

23. Estimated Duration
20 days

24. Attachments

The following, completed in accordance with the requirements of On shore Oil and Gas Order No. 1 shall be attached to this form:

1. Well plat certified by a registered surveyor. **Exhibit "A"**
2. A Drilling Plan **Exhibit "B"**
3. A Surface Use Plan (if the location is on National forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). **Exhibit "C"**

4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above). **RLB0001759**
5. Operator certification. **Exhibit "D" & as above**
6. Such other site specific information and/or plans as may be required by the authorized officer. **Exhibits "C"/"E"/"F"/"G"/ and "H"**

25. Signature

Name (Printed/Typed)
John Luchetta

Date
June 15, 2001

Title
Agent

Approved by (Signature)

Name (Printed/Typed)

Date

Title

Office

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212 make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* Instructions on reverse side

**Exhibits: A: Survey Plat
B: 10-Point Plan**

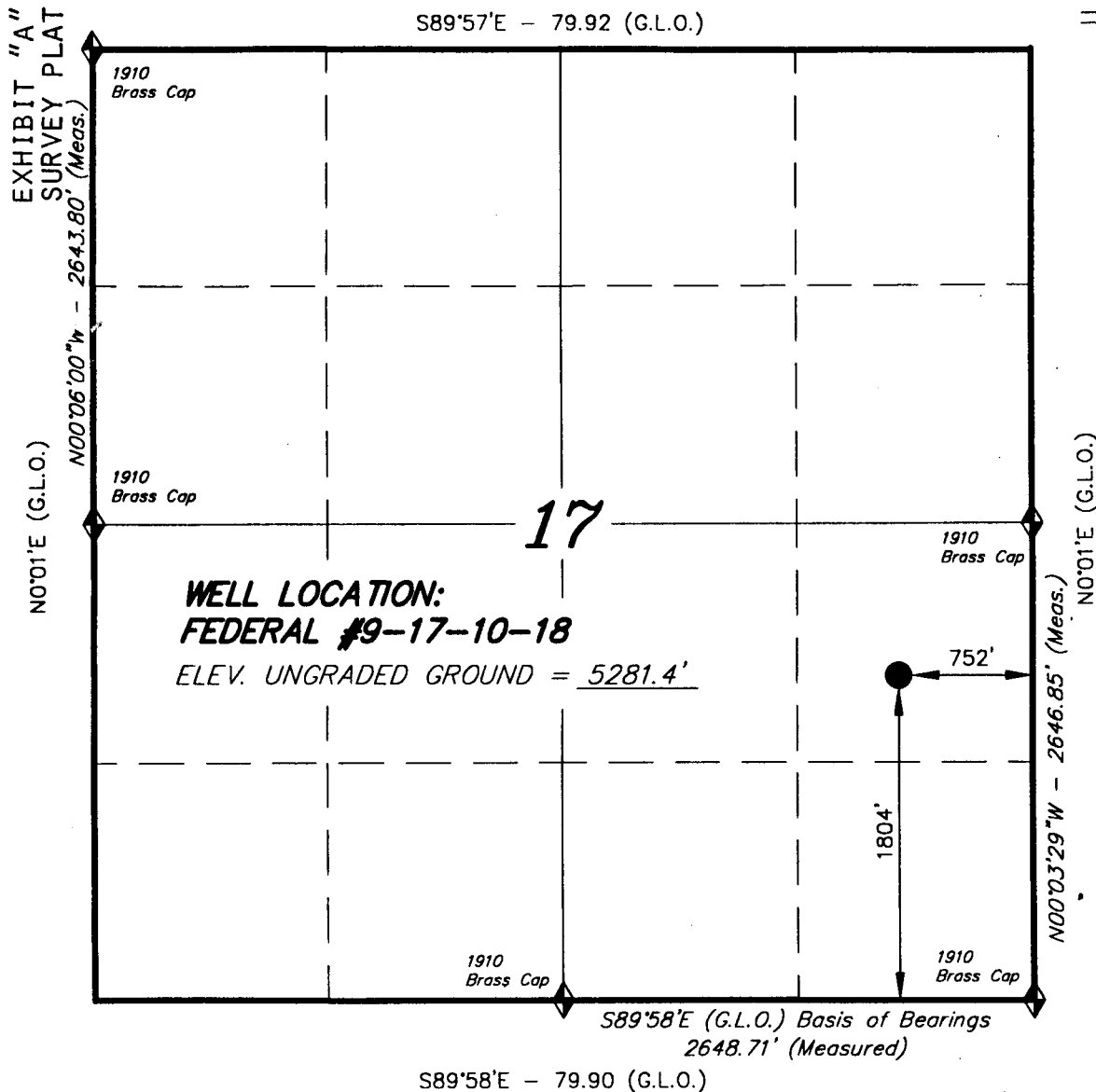
**C: BOP Diagram
D: 13 Point Surface Use Plan
E: Access Road Maps A&B**

**F: Location Layout
G: Rig & Cut/Fill Layouts
H: Existing Wells Map**

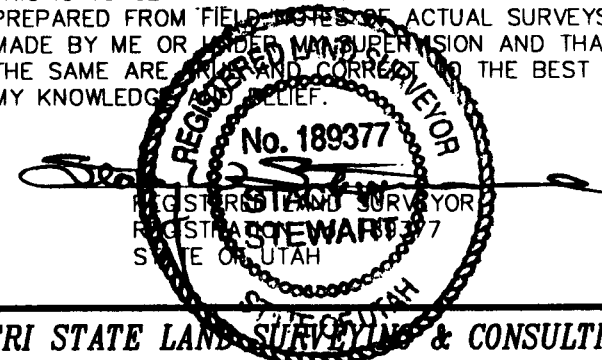
T10S, R18E, S.L.B.&M.

PENDRAGON ENERGY PARTNERS, INC.

WELL LOCATION, FEDERAL #9-17-10-18,
LOCATED AS SHOWN IN THE NE 1/4 SE
1/4 OF SECTION 17, T10S, R18E,
S.L.B.&M. UTAH COUNTY, UTAH.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS
MADE BY ME OR UNDER MY SUPERVISION AND THAT
THE SAME ARE TRUE AND CORRECT TO THE BEST OF
MY KNOWLEDGE AND BELIEF.



TRI STATE LAND SURVEYING & CONSULTING
38 WEST 100 NORTH - VERNAL, UTAH 84078
(435) 781-2501

SCALE: 1" = 1000'	SURVEYED BY: C.D.S.
DATE: 4-11-01	WEATHER: COOL
NOTES:	FILE #

◆ = SECTION CORNERS LOCATED
BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (CROW KNOLL)

EXHIBIT "B"
PROPOSED DRILLING PROGRAM

ONSHORE ORDER NO.1
Pendragon Energy Partners, Inc.
Desert Spring Federal #9-17-10-18
NE-SE Sec 17 - T10S - R18E
Uintah County, Utah

**OIL & GAS ORDER NO.1 (APPROVAL OF OPERATIONS ON
ONSHORE, FEDERAL AND INDIAN OIL AND GAS LEASES).**

All lease and/or unit operations will be conducted in a manner so that full compliance is made with the applicable laws, regulations (CFR 43, Part 3160) and the approved Application for Permit to Drill. The operator assumes full responsibility for the actions of its contractors and subcontractors. A copy of the approved APD will be on location during construction, drilling and completion operations.

The applicant does not warrant or certify that it holds legal or equitable title to those rights in the subject lease which would entitle operations thereon to proceed.

1. ESTIMATED FORMATION TOPS : (Elevation – 5281')		
FORMATION	DRILLED (ft) SUBSEA	PORE PRESSURE (psi/ft)
Green River	600 +4,681	Normal
Wasatch Tongue of Green River	4,700 + 581	Normal
Total Depth	5,000 + 394	Normal

* Offset pressure data supports pore pressure gradient @ 0.42 psi/ft.

2. ESTIMATED DEPTH OF OIL, GAS, WATER OR OTHER MINERALS:

SUBSTANCE	FORMATION	DEPTH (ft)
Water	None anticipated	
Gas	None	
Oil	Green River	4,000 – 5,000

3. PRESSURE CONTROL EQUIPMENT & SPECIFICATIONS :

- **Anticipated maximum surface shut-in pressure gradient:**
 - . $P_s = BHP - (0.22 * 5,000) = (0.42 * 5,000) - (0.22 * 5,000) = 1,000 \text{ psi.}$
 - . If a pressure anomaly occurs, API pressure control methods will be immediately imposed.
 - . Drilling fluid density materials will be available on location.
 - . Poison gas is not known to exist in the area.
- **BOP EQUIPMENT:** (See Exhibit "C")
 - . Type: Nominal 10" hydraulic double ram, 2,000 psi working pressure.
 - . Ram type preventers shall be installed after the prescribed WOC time has expired. The casing will be cut off and a weld-on companion flange fastened.
 - . Pipe & blank rams will be used.
 - . The BOP will be inspected, operated daily and on trips with the drill string. All tests will be recorded on the daily drilling log.
- **CHOKE MANIFOLD EQUIPMENT:** (See Exhibit "C")
 - . The hydraulic closing unit will be located @ least 100' upwind from the BOP stack.
 - . A remote BOP closing unit will be positioned near the driller's operating station.

- . Burst pressure rating – 2,000 psi.
- . The choke manifold, BOP extension rods and handwheels will be located outside the substructure.
- . The kill line will be 2" nominal rated @ 2,000 psi.
- **BOP TESTING:**
 - . Upon installation.
 - . If any seal subject to pressure is broken.
 - . Every 30 days if drilling operations continue beyond anticipated 10 days.
 - . A test plug will not be used since testing can be accomplished w/o exposing surface casing to excess pressures (70% of internal yield).

4. TEST PRESSURES AND OTHER SPECIFICATIONS ANTICIPATED:
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UNIT	PROPOSED TEST PRESSURE (psi)
Pipe rams	2,000
Blind rams	2,000
Manifold	2,000
Surface casing	1,500 (or .70 x rated burst)
Floor valve	2,000
Annular	2,000

- . Upper & lower kelly cock will be maintained in the drill string.
- . Drill string float will not be used.
- . The floor valve will be available in the open position @ all times and will be operated daily.
- . BLM agent will be notified at least 24 hours before all BOP tests.
- . BOP & pressure control drills will be conducted.

5. PROPOSED CASING & CEMENTING PROGRAM:								
PROPOSED CASING	HOLE SIZE	CASING SIZE	TOP OF SECTION (ft)	SECTION LENGTH (ft)	PHYSICAL DATA	Pressure Rating (psi)		Cement Top
						Burst	Collapse	
Conductor	17 ½"	16"	0	60	Steel			Surface.
Surface	12 ¼"	8 5/8"	0	250	24# J55 STC	2,950	2,210	Surface
Production	7 7/8"	5 ½"	0	5,000'	15.5# J55 STC	4,800	4,040	NA

Note: All casing will be new.

• **CASING SPECIFICATIONS AND CONDITIONS:**

- . Stage cementing is not anticipated.
- . The production casing will be tested @ 2,000 psi or 70% of minimum yield for a period of 30 minutes with not more than 10% drop.
- . Formation Pore Pressure (from offset pressure data) -- 0.420 psi/ft.
- . Formation Fracturing Gradient ----- 0.700 psi/ft.
- . Mud Density (Max lbs/gal) ----- 9 ppg @ 5,000'.
- . Collapse ----- 1.120.
- . Burst ----- 1.000.
- . Tension ----- 1.800.
- . Casing joints will be torqued according to API standards.
- . Three centralizers will be placed on collars of the bottom 3 joints (Surface and Intermediate casing).
- . A centralizer will be placed on each collar through production zones and every joint 300' above and below production zones (Production casing).

• **CEMENTING PROGRAM:**

- . CONDUCTOR CASING: Cement to surface w/ ready mix.

- . **SURFACE CASING:** Cement to surface w/150 cuft "Lite" tailed w/100 cuft premium.
- . **PRODUCTION CASING:** Will be cemented from TD to 600' above top pay zone. Volume of cement will be determined from caliper log.

6. PROPOSED DRILLING FLUID SPECIFICATIONS:					
DEPTH INTERVAL	TYPE	DENSITY Lbs/gal	VISCOSITY	FLUID LOSS	MAKE UP WATER
0 - 250'	Gel	8.7 – 9.0	26-40	NC	Fresh
250' - TD	Gel	8.4 – 9.0	26-50	NC	Fresh

- **OTHER DRILLING FLUID SPECIFICATIONS AND CONDITIONS:**
 - . LCM will be present on location @ all times during drilling.
 - . Fluids parameters to be measured daily - density, viscosity, fluid loss, pH, solids, chlorides, bicarbonate and carbonates.
 - . Concentration of hazardous substances in the reserve pit will not exceed standards set forth in the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).
 - . Oil & gas related CERCLA hazardous waste substances will be removed from location and will be disposed of according to EPA approved methods.

7. EVALUATION OF OPERATIONS WHILE DRILLING:
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- **MUD MONITORING SYSTEMS (Swaco):**
 - . Pit level indicator, flow sensor w/alarms, PVT and stroke counter will not be used.
 - . A trip tank will not be used.
 - . Gas detection equipment (mud logger) will not be used.
 - . A mud-gas separator will not be used.

- **DRILL STEM TESTS:** None anticipated.

- . If it becomes necessary to conduct a drill stem test, initial opening of the test will be restricted to daylight hours.
- . If a test is initiated during daylight hours, it will be allowed to continue assuming OSHA considerations are strictly met.
- . The DST string will not be pulled out of the hole after dark unless recovered fluids have first been reverse circulated to a suitable closed steel tank placed at least 100' down wind from the wellhead.
- . Smoking will not be allowed on the rig floor or within 100' upwind from the rig floor during test operations.
- . Only rig engines will be allowed to run during testing. All others will be moved at least 100' upwind from the rig floor.

- **LOGGING PROGRAM:**

- . The following open hole logs are anticipated:

Run #1 @ TD

(1) GR - DLL ----- TD to base of Surface casing.

(2) CNL - Density – Caliper --- TD to base of surface casing.

- . The following cased hole logs are anticipated:

(1) GR-CCL ----- PBTD to 500' above the pay zone.

(2) CBL (Cement Bond Log) ----- PBTD to cement top.

- **SAMPLING PROGRAM:**

- . 250 to +/- 4,000' ----- 30' samples will be collected.
- . 4,000' to TD ----- 10' samples may be collected as necessary.

CORING: Not anticipated.

8. ANTICIPATED PORE PRESSURES & HAZARDOUS MATERIALS:

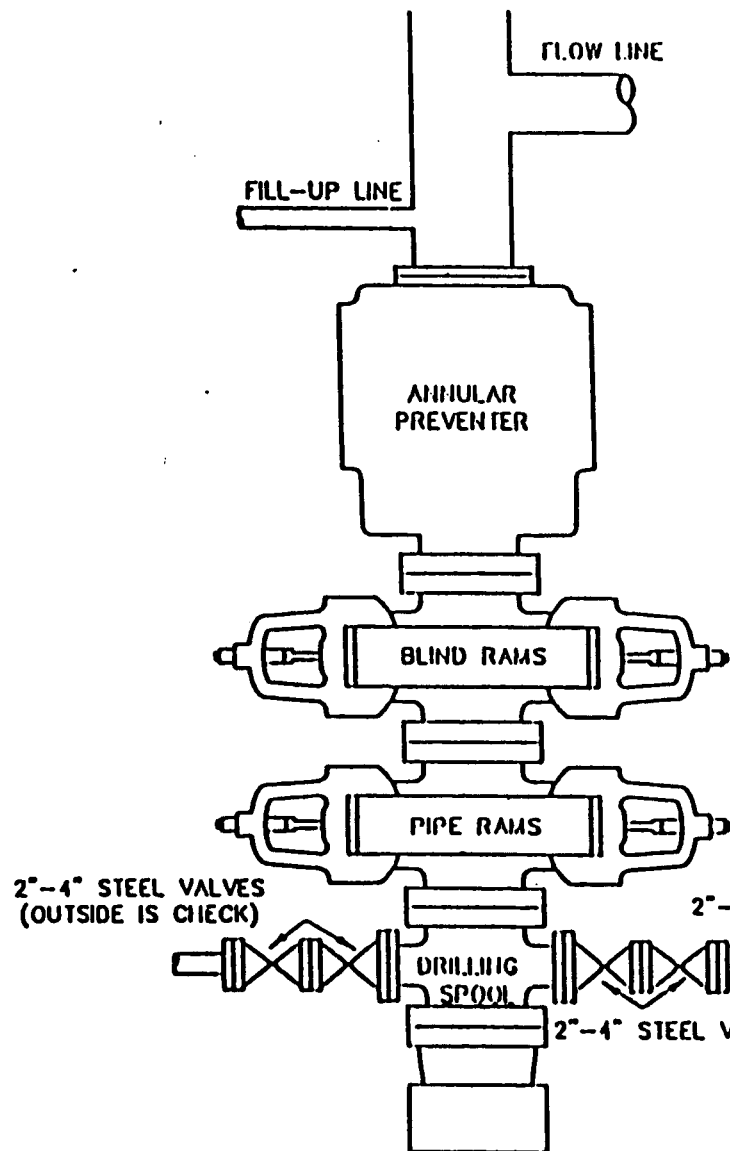
- **PORE PRESSURE:**
 - In the surface hole – normal to subnormal pressures are anticipated.
 - In the Green River – normal to subnormal pore pressures are anticipated (0.420 psi per ft.).
- **HAZARDOUS MATERIALS:** None anticipated.

9. OTHER INFORMATION, NOTIFICATION & REPORTING:
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OPERATION	DATE OR ANTICIPATED TIME
Proposed start time	Aug 15, 2001
Drill pad & road construction time	2 - 4 days
Drilling operations & formation evaluation	8 - 10 days
Completion & testing time	5 - 10 days
Facilities installation	5 - 10 days
Initial restoration start time	180 days or as weather permits
Final restoration time	5 - 10 days

- **INFORMATION & REPORTING PLAN:**
 - **DRILLERS LOG:**
 - BOP, manifold, casing pressure tests - as done.
 - BOP mechanical test – as done.
 - Blowout prevention drills – as done.
 - Casing installation & cementing – as done.
 - WOC time – as done.
 - Incidents of lost circulation or pressure anomalies – as occurs.
 - **REGULATORY REPORTING :**
 - Notification of location construction - 24 hours prior to start up.
 - Notification of spud – prior to spud and/or within 48 hours after.

- . Notification of BOP test – at least 24 hours prior to testing.**
- . P&A - the Vernal Resource Office will be contacted prior to plugging .**
- . Form 3160-4 - monthly.**
- . Form 3160-5 - within 30 days after P&A or completion of the well.**
- . Facilities diagram – as required by CFR 43 Part 3162.7-2 and 3162.7-4.**
- . Undesirable events will be reported as specified in NTL-3A.
Major events will be reported verbally within 24 hours. Minor events
will be reported within 15 days. Other events will be reported in the
monthly report of operations.**



LUCHETTA OPERATING CO., INC.
2020 FOOTHILLS RD. • GOLDEN, CO 80401

EXHIBIT "C"
BOP & MANIFOLD SPECIFICATIONS
(MEETS 43 CFR, PARTS 3160 DESIGN)
SERIES 600 2,000 PSI RATING

CHOKE MANIFOLD

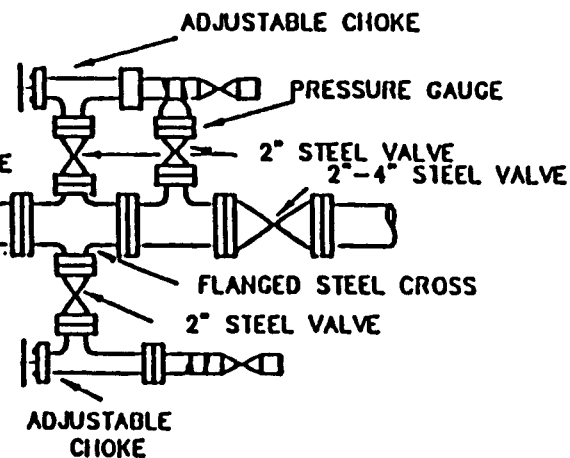


EXHIBIT "C" BOP DIAGRAM

EXHIBIT "D"
PROPOSED SURFACE USE PROGRAM

ONSHORE ORDER NO. 1
PENDRAGON ENERGY PARTNERS, INC.
DESERT SPRING FEDERAL #9-17-10-18, NE SE Sec 17-T10S-R18E
Uintah County, Utah

- **SURFACE OWNER (BLM)**
- **SURFACE LOCATION: (See Exhibit "A"). NE-SE Sec 17-T10S-R18E.**
- **Distance from : 29.7 miles from Myton, Utah (See Exhibits "E").**
- **Directions to location: South from Myton 1.6 miles then 12.5 miles to Castle Peak Mine then left for 14.8 miles to lease road, then right on lease road 1,695'.**

1. EXISTING ACCESS ROADS: (See maps "A" & "B")

- **All existing access roads will be maintained as is with repairs or maintenance as needed.**
- **No improvements or changes to existing roads are anticipated.**
- **Map "A" is the vicinity map showing access routes from Red wash, Utah.**
- **Topo Map "B" shows the proposed access road to the pad.**
- **Occasional maintenance blading and storm repairs will keep roads in good condition.**
- **There shall be no mud blading on the access road. Vehicles may be towed through the mud provided they stay on the roadway.**
- **All road construction and maintenance will conform to standards identified in "Surface Operating Standards for Oil and Gas Exploration and Development" (Gold Book) U.S. Department of the Interior-BLM and U.S. Department of Agriculture-Forest Service; January 1989.**

2. ACCESS ROADS TO BE CONSTRUCTED:

- **Road Specifications For Drilling Operations:**
 - **Approximately 3,720 feet of new road construction will be required.**
 - **Width – maximum 30-feet overall right-of-way with an 18-foot running crown & ditched and/or sloped and dipped.**
 - **Construction standard – the access road will be constructed to standards normal to the area with anticipated traffic flow and weather requirements considered. Ditching, crowning, capping, sloping, and dipping will be done to provide a safe roadway.**
 - **Off-road travel of the 30 foot right-of-way will not be allowed.**
 - **Road drainage crossings – will be designed so they will not cause siltation or the accumulation of debris. Erosion will be prevented by properly designed cutouts.**
 - **Upgrading – will not be allowed during muddy conditions. Mud holes will be repaired as they occur.**
 - **Maximum grade – will be less than 8%.**
 - **Drainage design – as stated above.**
 - **Turnouts – none anticipated.**
 - **Culverts – none anticipated.**
 - **Surface materials – any materials if required will be purchased from a local supplier having a permitted source.**
 - **Gates, cattle guards or fence cuts – none required.**
 - **The proposed access road has been centerline flagged.**

- . Dust will be controlled on the roads and location by periodic watering.
- . A road design plan will be submitted upon completion for production.

3. EXISTING WELLS WITHIN 1 MILE:

- Locations ----- None
- Water wells ----- None.
- Disposal wells ----- None.
- Drilling ----- None.
- Producing wells ----- None.
- Injection ----- None.
- Dry holes ----- None.

4. LOCATION OF EXISTING PRODUCTION FACILITIES.

- Existing Facilities:
 - . Tank batteries ----- None.
 - . Production facilities ----- None.
 - . Gathering lines ----- None.
 - . Injection or disposal lines ----- None.

- **Proposed new facilities to be installed:**
 - . **A facilities diagram will be provided in the event oil production is established and will outline the following:**
 - a. **Proposed location and attendant lines – will be flagged if off the well pad.**
 - b. **Dimensions of the layout.**
 - c. **Construction methods and materials.**
 - d. **Protective measures and devices to protect livestock and wildlife.**
 - e. **Pipelines – will be buried a minimum of 3-feet except at road crossings which will be buried 4-feet.**
 - f. **Road and pipeline will be restricted to 50-feet of disturbance. Vehicular travel will be restricted to that necessary to service drips and the need to use valves.**
 - g. **Only native materials will be used. If necessary appropriate materials will be purchased from private or commercial sources.**
 - h. **A dike to contain the volume of the largest tank + 10% will be constructed around the facility.**
 - i. **All above ground facilities will be painted a flat non-reflective, earthtone color (Carlsbad Canyon – 2.5Y 6/2) as determine by the Five State Rocky Mountain Interagency Committee within six months of installation except where OSHA regulations require safety approved colors.**

5. LOCATION OF WATER SUPPLY TYPE & OWNERSHIP:
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Owner: Water well operated by Nebeker Trucking. Permit #43-1721.

Location: Sec 34 T3S-R2W, USM.

Method of transportation: Trucking.

6. SOURCE OF CONSTRUCTION MATERIALS:

- No construction materials are anticipated for drilling operations.
- If commercial production is indicated small amounts of gravel materials will be trucked from local gravel pits over existing roads.
- No materials from Indian or federal lands will be disturbed.

7. METHODS FOR HANDLING WASTE DISPOSAL:

- Drilling fluids – including salts and chemicals will be contained in the reserve pit. Upon termination of drilling and completion operations, liquid contents of the reserve pit will be removed and disposed of in an approved disposal facility within 90 days. In the event adverse weather conditions prevent removal of the fluids from the reserve pit within this time period, an extension may be granted by the Authorized Officer upon receipt of a written request.
- The reserve pit will be constructed to prevent any discharge to the surroundings or underlying formations. If necessary the pit will be lined with a 12 mil plastic liner.
- Produced fluids:
 - Liquid hydrocarbon produced during completion operations will be placed in test tanks on location and transferred to the production facility when it is ready for use. After completion and testing operations are complete production will be routed through buried pipelines to be processed in the newly constructed facility.
 - Waste water produced into a test tank or the reserve pit during completion and testing operations will be removed to an approved disposal facility within 90 days. In accordance with Onshore Order #7 an application for a permanent disposal method and site will be submitted for the Authorized Officer's approval.
 - Spills of oil, gas, salt water or other noxious fluids will be immediately removed to an approved disposal site.

- . **Used motor oil** will be stored in closed containers and disposed of at an authorized disposal site.
- . **Trash pit** will be constructed and totally enclosed with fine mesh wire to prevent scatter. No trash will be directed to the reserve pit. The contents of the pit will be disposed of in a WDEQ approved sanitary landfill.
- . **Test tanks** will be moved in if such becomes necessary for an impending drill stem test or during completion testing.
- . **Steel drilling fluids tanks** will be part of rotary drilling equipment (approximately 1,000 bbl capacity).
- . **Flare pit** will be located a minimum of 120' down wind from the well bore if needed.
- . **Human wastes** will be contained in portable chemical toilets. Upon completion of operations, the holding tanks will be removed by the sanitation contractor. Disposal will be in conformance with Utah Department of Environmental Quality (UDEQ).
- . **Drill cuttings** will be transferred over shale shaker equipment to the reserve pit. After drilling and completion operations are completed, excess liquids will be removed to disposal and drill cuttings will be buried in the reserve pit per approved pit restoration procedures.
- . **Garbage and trash** collected in the trash pit during restoration proceedings will be removed to an approved disposal facility.
- . **Sewage** collection units installed prior to drilling start up will be serviced daily.
- . **Hazardous materials** the operator will comply with all applicable Federal laws and regulations existing or hereafter enacted. EPA's consolidated list of chemicals is subject to reporting under Title III of the Superfund amendments and Re-authorization Act (SARA) of 1986, as identified (EPA's list of extremely hazardous substances as defined in 40 CFR 355, as amended). Substances that may be used in the project are as follows:

USE	CHEMICAL	CAT (2)	EHC (3)
Stimulation	Acid	None	None
Mud	AlSi	None	None
Mud	BaSo4	None	None
Mud	CaOH	None	None
Increase vis	HMW add	None	None
Cement	Insol Ca Salt	None	None
Mud	Caustic	None	None
Mud/Cement	None	None	None
Mud/Cement	None	None	None
Mud/Cement	None	None	None
Set casing	Lime	None	None
Thinner	None	None	None
Mud	None	None	None
Fuel	Benzene	RCRA	None
Mud	None	None	None
None	None	None	None
Mud/Cement	None	None	None
Mud	None	None	None
Mud	None	Fiber	None
Mud	Ca	None	None
Mud (LCM)	Fiber	None	None
Lubricant	Zinc	None	None
Fuel	None	None	None
None	None	None	None
Maintenance	Lead	Fine Min	None
Mud	None	None	None
Mud (LCM)	Fiber	None	None

8. ANCILLARY FACILITIES:

- Airstrips: None
- Camp: Two portable units will be on location:
 1. Toolpusher's living quarters.
 2. Company supervisor's living quarters.

9. WELL SITE LAYOUT: (See Exhibit "G")

- **Location orientation:**

- Top soil: Approximately 6 inches will be stripped from the surface including areas of cut and fill. Topsoil and subsoil will be stockpiled for future reclamation requirements. The stockpiles will be seeded as required by the BLM.
- Location Size: 170' x 290'.
- Reserve pit size: 110' x 50' x 8'.
- Pit liner – 12 mm plastic if needed.
- Pit fencing: Three sides will be fenced prior to drilling . The fourth side will be fenced after drilling equipment is removed from the well site. Fencing materials will consist of 39-inch wire with at least one strand of barbed wire on top of the net wire placed no more than 3-inches above the net wire. The net wire will be no more than 3-inches above the ground. Corner posts will be cemented and braced to impose a tight fence. Standard steel, wood or pipe posts will be placed on 16' centers. All wire will be stretched with a stretching devise.

- **Rig layout: (See Exhibit "G").**

- There may be two temporary living quarters on location during drilling operations. These will be occupied by the rig superintendent and company representatives.

- **Production facilities:**

- A diagram showing proposed production facilities will be submitted to the Authorized Officer via Sundry Notice (Form 3160-5) after completion and testing is finished.

10. PLANS FOR RECLAMATION OF THE SURFACE:
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- **Due to drilling and completion:**

- The rat hole, and mouse hole will be filled and compacted from bottom to top immediately upon release of the drilling rig.

- . Floating hydrocarbons etc will be removed as soon as possible after drilling operations are complete in accordance with 43 CFR 3162.7-1.
- . Drill cuttings and mud will remain in the reserve pit until dry. The reserve pit will not be "squeezed", "crowded" or "cut". When the reserve pit is reclaimed, at least three feet of earth will be placed on top of the drilling fluids and cuttings.
- . If the reserve pit does not dry within the prescribed time, alternate methods will be investigated.
- Dry hole (Commercial production not established):
 - . A Notice of Intent to Abandon will be filed . Final recommendations for surface reclamation will be specified by the BLM.
 - . The drill site will be restored to its original condition.
 - . The wellbore will be P&A'd according to the approved program.
 - . An approved marker will be positioned as directed.
 - . Spoil will be replaced to original conditions.
 - . Top soil will be replaced and smoothed.
 - . If necessary, water bars will be constructed according to BLM Conditions of Approval.
 - . All disturbed surface under the jurisdiction of the BLM will be seeded using the following mixtures:

SPECIES OF SEED	VARIETY	LBS/ACRE	PLS
Western wheat grass		4	
Green needle grass		4	
Stream ban wheat grass		3	
Blue bunch wheat grass		3	
Oats		1	
PLS formula	% germination * % purity	x	100%

- **Seeding Procedure:**

- . The BLM designated Authorizing Officer will be notified prior to seeding operations.
- . The seed will be applied with a regulator equipped drill.
- . Planting depth shall not exceed ½ ”.
- . If possible, seeding will be done in the months of September or October, providing all preliminary work is done by that time.
- . Where drilling is not possible, the seed will be broadcast and the area raked or chained to cover the seed.
- . Seeding will be repeated until a satisfactory stand, as determined by the BLM Authorized Officer, is established.
- . Where seed is broadcast, the mixture will be doubled.
- . There will be no primary or secondary noxious weeds in the mix.
- . Seed will be tested for purity and germination. Viability testing of seed will be done in accordance to state law 9 months prior to purchase or sooner.
- . Commercial seed will be certified.
- . The seed mixture container will be tagged in accordance with Utah state law. Copies of seed test results and certification will be forwarded to the BLM.
- . Weeds will be controlled on disturbed areas within the exterior limits of the permit.

- **In the event production is established:**

- . Those areas not required for production will be re-contoured and the cut and fill slopes will be reduced to 4:1, if applicable.
- . Topsoil will be distributed evenly and seeded as above.
- . All topsoil stockpiles will be seeded with annual ryegrass.

- . If a plastic or nylon reinforced pit liner is used, it will be torn and perforated before backfilling of the reserve pit.
- . Prior to restoration of the reserve pit, it will be completely dry and all cans, barrels, pipe etc. will be removed. Other waste materials will be disposed of immediately upon completion of drilling and completion activities.
- . The flare pit and that portion of the access road not needed for production facilities or operations will be reclaimed within ninety days from the date of completion.
- . The access road will be upgraded and maintained as needed for production operations.
- Pesticide use:
 - . The use of pesticides will comply with federal and state laws governing its proper use, storage, and disposal.
 - . The use of pesticides will occur within limitations imposed by the Secretary of the Interior.
- All procedures listed above for a dry hole will also be applied to a well completed for production as follows:
 - . A facilities diagram and plan will be submitted for approval.
 - . Flowline route will be outlined on a suitable map of the area.
 - . Produced water will be temporarily disposed of in the reserve pit according to Onshore Order No 7 (90 day limit).
 - . If more time is needed, an extension will be requested.
 - . Sundry notice form 3160-5 (Application for permanent disposal) will be filed if necessary.

11. SURFACE OWNERSHIP:

- . Name: BLM
- . Address: Vernal, Utah

12. OTHER INFORMATION:

A. General description: Utah grazing and ranch land.

B. Surface use activities: Cattle grazing and other typical ranch activity.

C. Proximity of water, occupied dwelling, archaeological or paleontological sites:

- 1. The majority of the numerous washes and draws in the area are of a non-perennial nature, flowing during the early spring run-off and heavy rain storms.**
- 2. The flora of the area includes pinion and juniper trees, sagebrush, greasewood, four-wing saltbush, cheatgrass, gambel scrub oak, willow, tamarack, shadscale, indian ricegrass, wheatgrass, curly grass, crested wheatgrass, foxtail, russian thistle, kochia, and cacti.**
- 3. Fauna includes cattle, horses, elk, deer, coyotes, rabbits, rodents, lizards, bull snakes, rattle snakes, water snakes and horned toads. Birds include ground sparrows, bluejays, bluebirds, magpies, ravens, raptors, morning doves, swallows, nighthawks, hummingbirds and chukar.**
- 4. The nearest live water is the Green River.**
- 5. There are no dwellings in the area.**
- 6. An archaeological survey has been completed and mailed to the BLM under separate cover. No significant archaeological or historical cultural sites were found.**
- 7. There are no reported restrictions or reservations note on the oil and gas lease.**

13. OPERATOR'S REPRESENTATIVES AND CERTIFICATION:

	ADDRESS	PHONE #	FAX #	HOME #
Al Nicol	621 17 th Street, Suite 750 Denver, CO 80293	303 296 9402	303 296 9410	303 425 4115
John Luchetta	2020 Foothills Rd. Golden, CO 80401	303 278 3347	303 278 9506	303 278 3347

14. GOVERNMENT CONTACTS:

	ADDRESS	PHONE #	
Stanely R. Olmstead	170 South 500 East Vernal, Utah	435 781 4400	435 781 4410

- Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the proposed operations herein will be performed by Pendragon Energy Partners, Inc., its contractors and subcontractors. Pendragon Energy Partners, Inc. will operate the lease under Flood & Peterson Federal Bond #RLB0001759. This statement is subject to the provisions of 18 U. S. C. 1001 for the filing of a false statement.

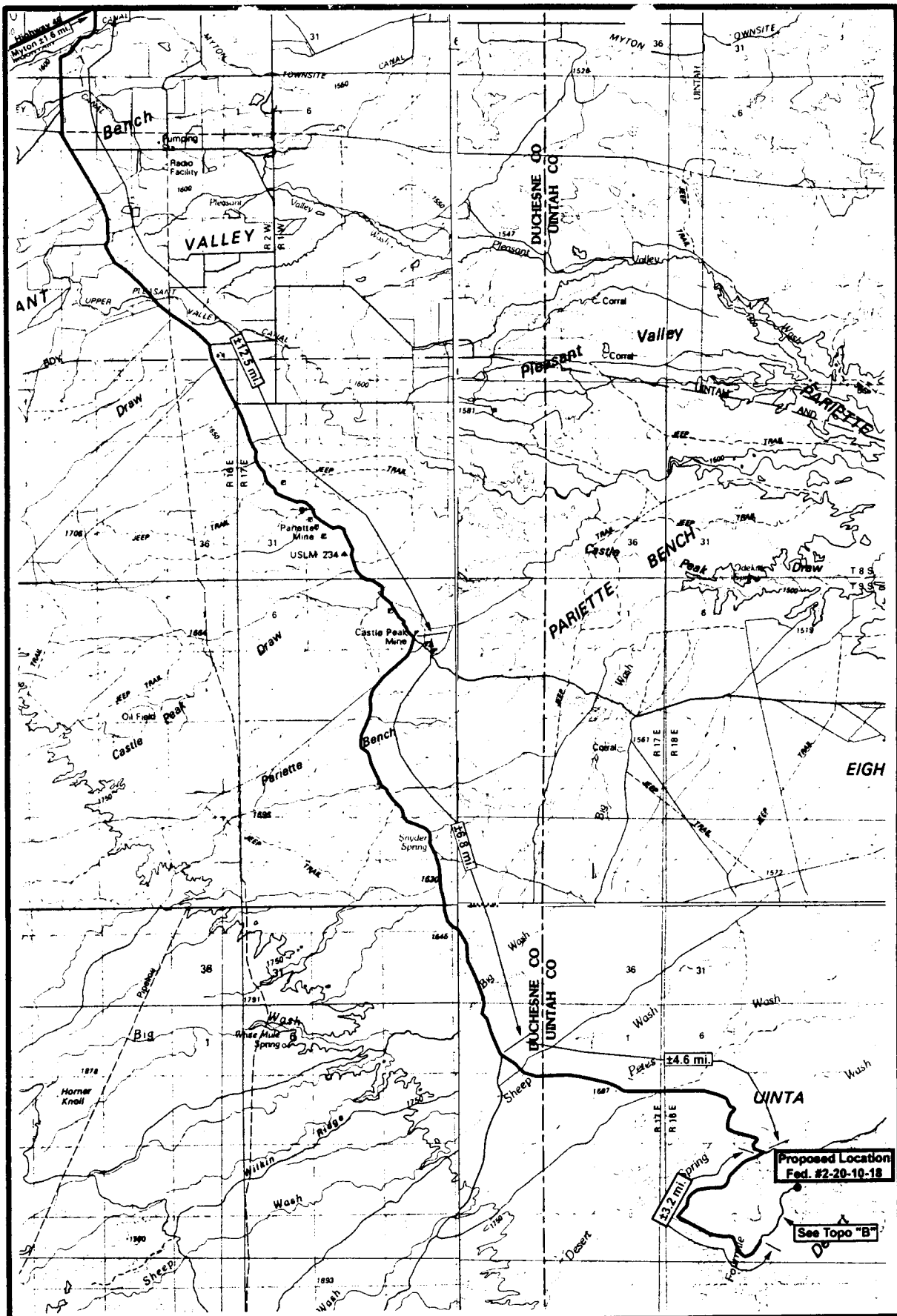
A complete copy of the approved Application for Permit to Drill will be furnished to the operator's field representative to ensure compliance and will be on location during all construction, drilling and completion operations.

Please be advised that Pendragon Energy Partners, Inc. is considered to be the operator of Well No. 9-17-10-18 NE SE Sec 17, T10S, R18E; Lease Desert Spring Federal; Uintah County, Utah; and is responsible under the terms and conditions of the lease for operations conducted upon the leased lands. Bond coverage is provided by Flood & Peterson Federal Bond #RL B0001759.

Sept 1, 2001

Date

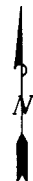
Pendragon Energy Partners, Inc.
John Luchetta, Agent



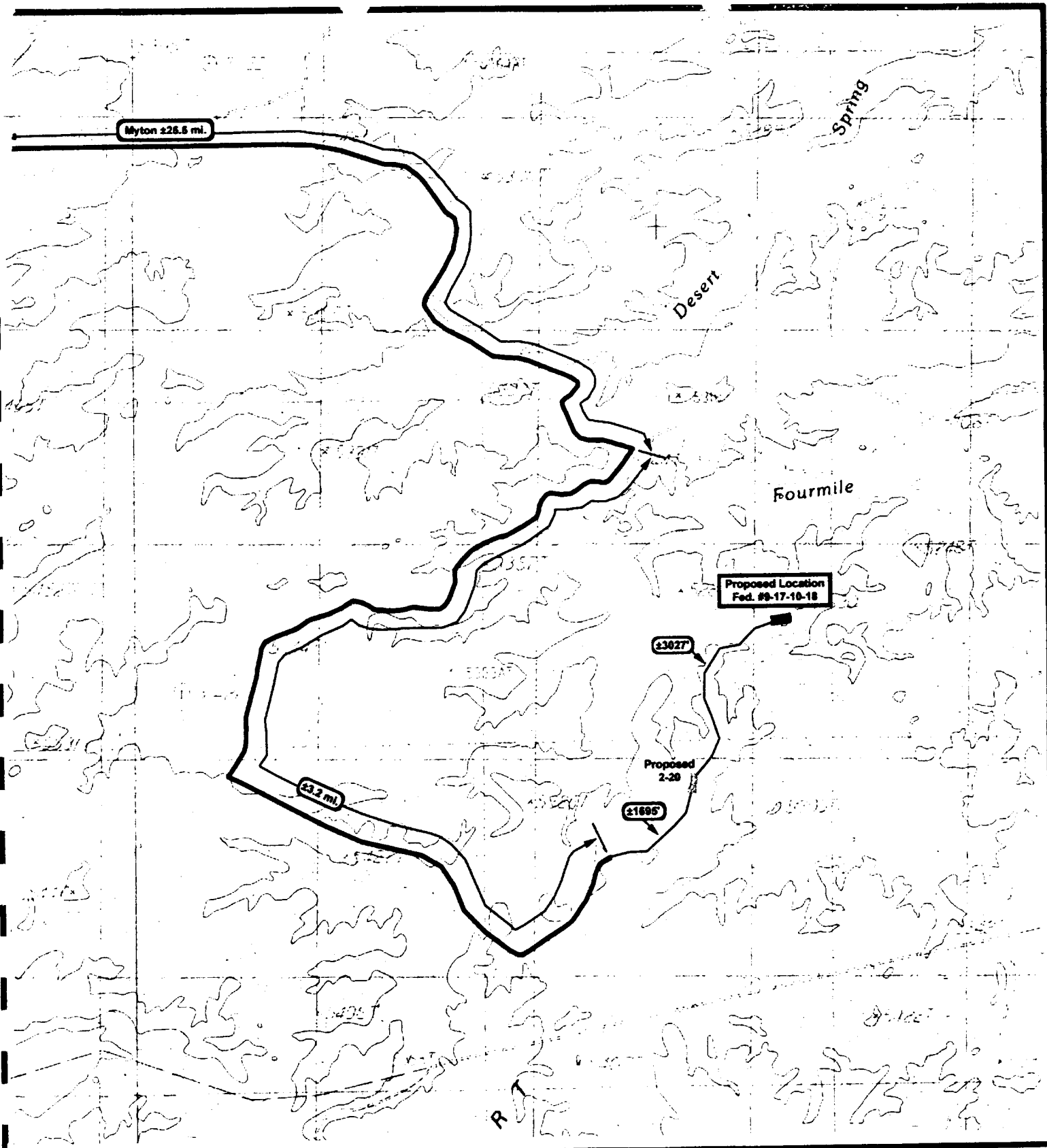
PENDRAGON ENERGY PARTNERS, INC.

**FEDERAL #9-17-10-18
SEC. 17, T10S, R18E, S.L.B.&M.**

TOPOGRAPHIC MAP "A"

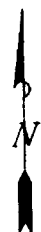


Drawn By: bgm	Revision:
Scale: 1 : 100,000	File:
Date: 04-12-2001	
Tri-State Land Surveying Inc. P.O. Box 533, Vernal, UT 84078 435-781-2501 Fax 435-781-2518	



PENDRAGON
ENERGY PARTNERS INC.

Federal #9-17-10-18
SEC. 17, T10S, R18E, S.L.B.&M.



Tri-State
Land Surveying Inc.
 (435) 781-2501
 38 West 100 North Vernal, Utah 84078

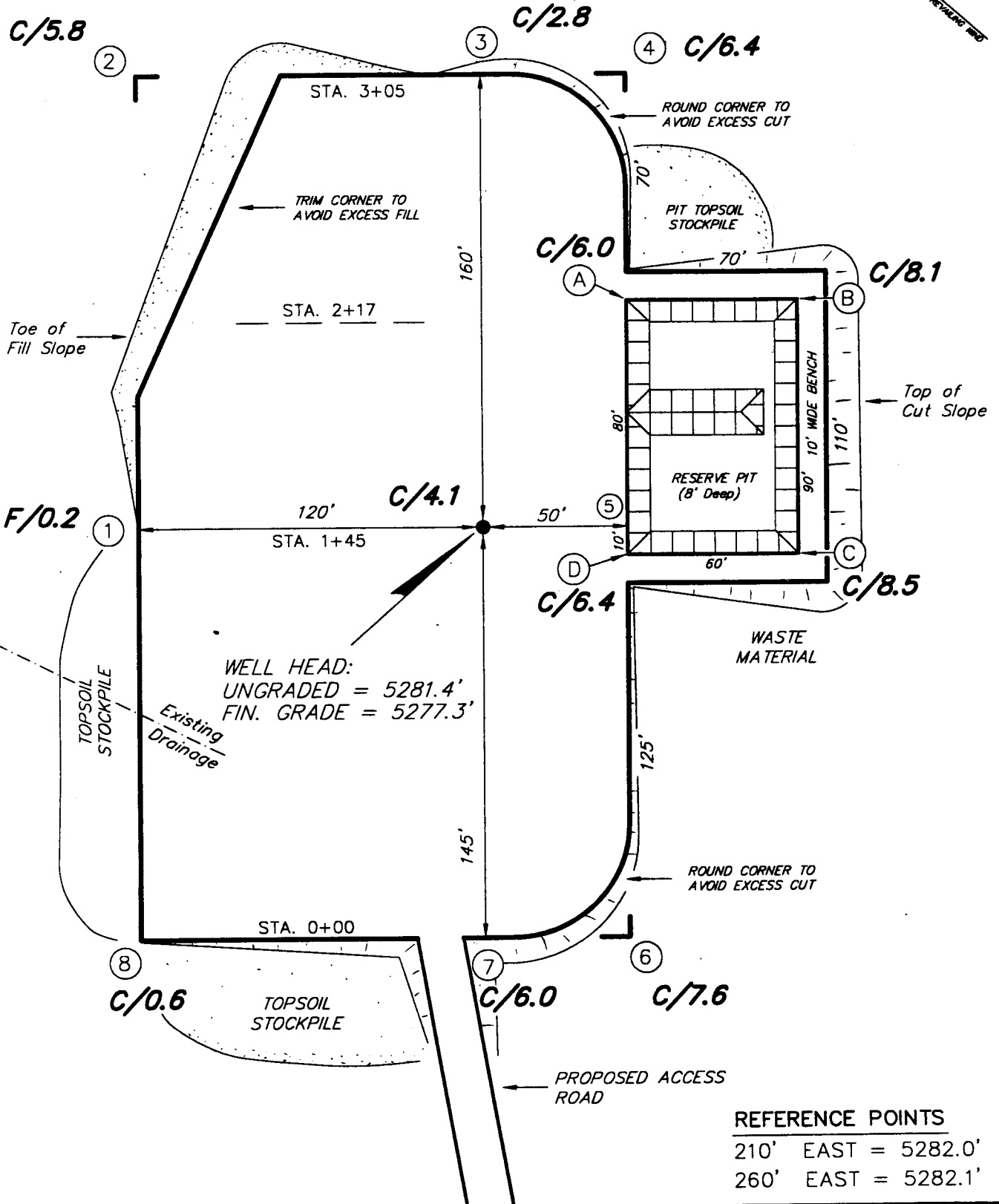
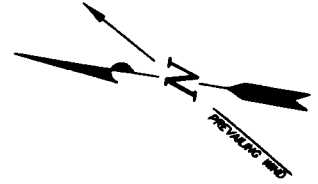
SCALE: 1" = 2000'
 DRAWN BY: bgm
 DATE: 04-12-2001

Legend
 Existing Road
 Proposed Access

TOPOGRAPHIC MAP
"B"

PENDRAGON ENERGY PARTNERS, INC.

FEDERAL #9-17-10-18
SEC. 17, T10S, R18E, S.L.B.&M.



SURVEYED BY: C.D.S.

SCALE: 1" = 50'

DRAWN BY: J.R.S.

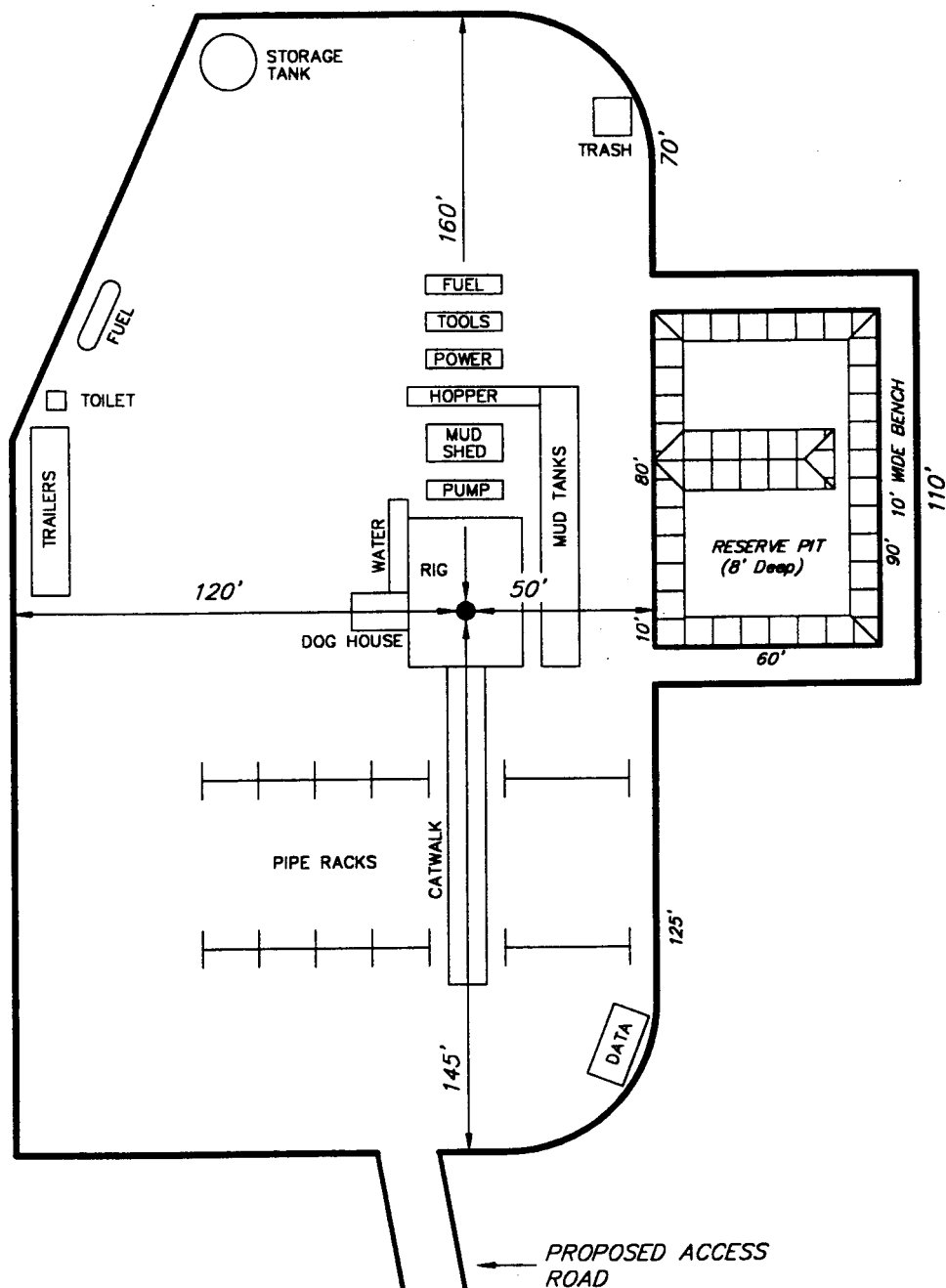
DATE: 4-11-01

Tri State
Land Surveying, Inc.
(435) 781-2501
38 WEST 100 NORTH VERNAL, UTAH 84078

PENDRAGON ENERGY PARTNERS, INC.

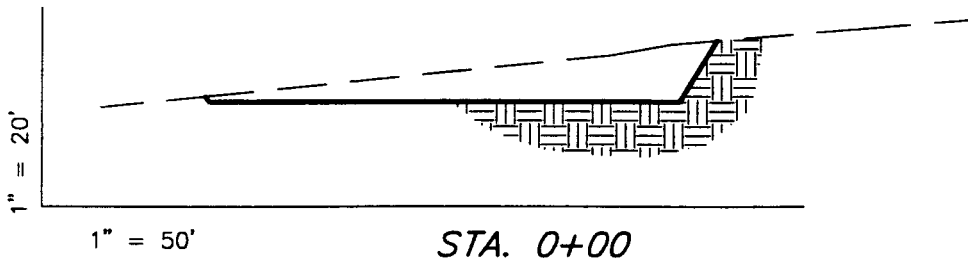
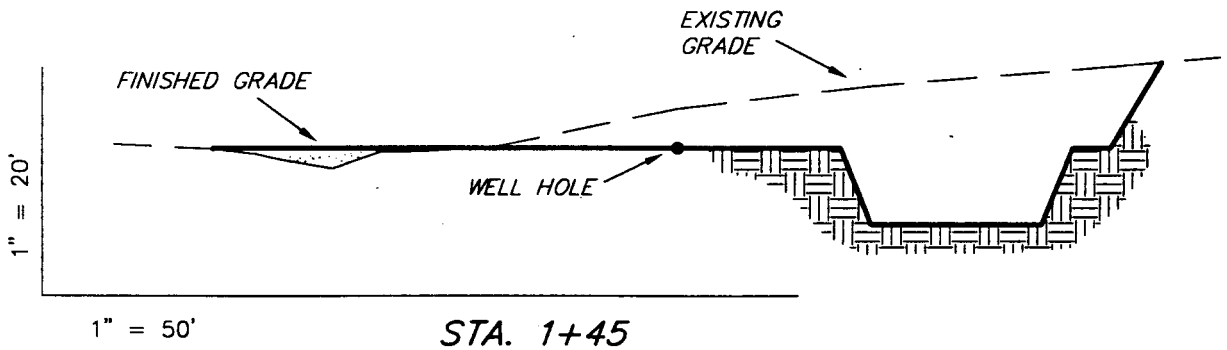
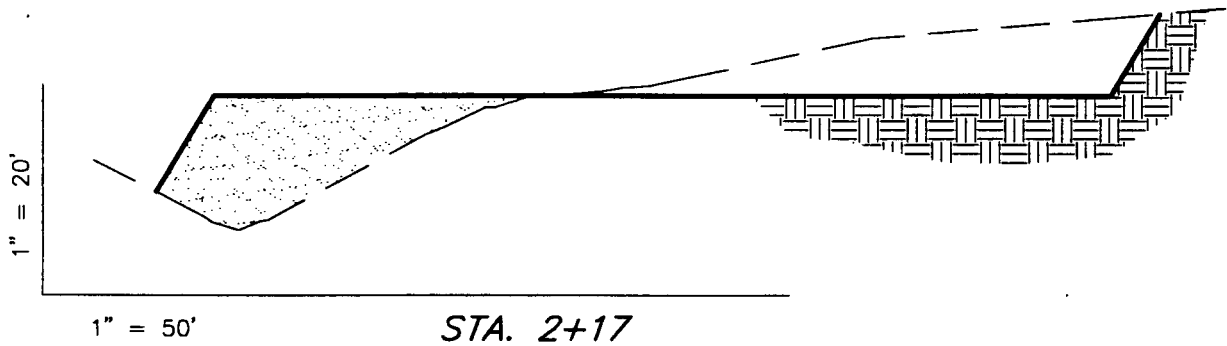
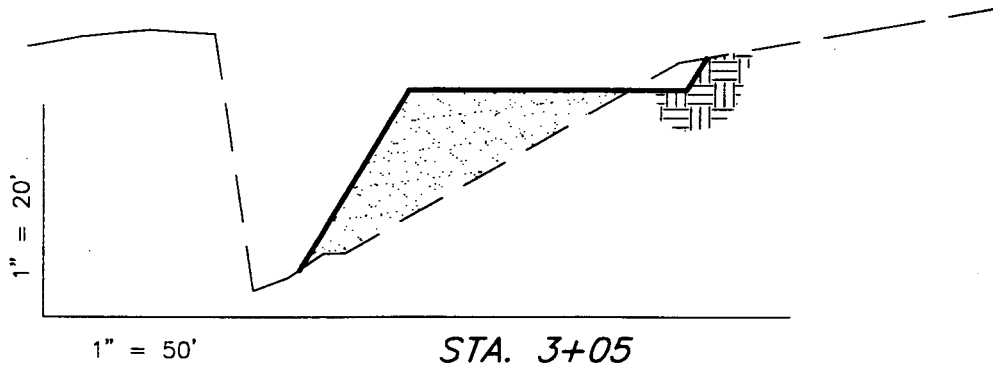
TYPICAL RIG LAYOUT

FEDERAL #9-17-10-18



Tri State
Land Surveying, Inc.
(435) 781-2501
38 WEST 100 NORTH, VERNAL, UTAH 84078

PENDRAGON ENERGY PARTNERS, INC.
CROSS SECTIONS
FEDERAL #9-17-10-18



APPROXIMATE YARDAGES

CUT = 5,330 Cu. Yds.
FILL = 5,310 Cu. Yds.
PIT = 1,020 Cu. Yds.
6" TOPSOIL = 1,010 Cu. Yds.

SURVEYED BY: C.D.S.

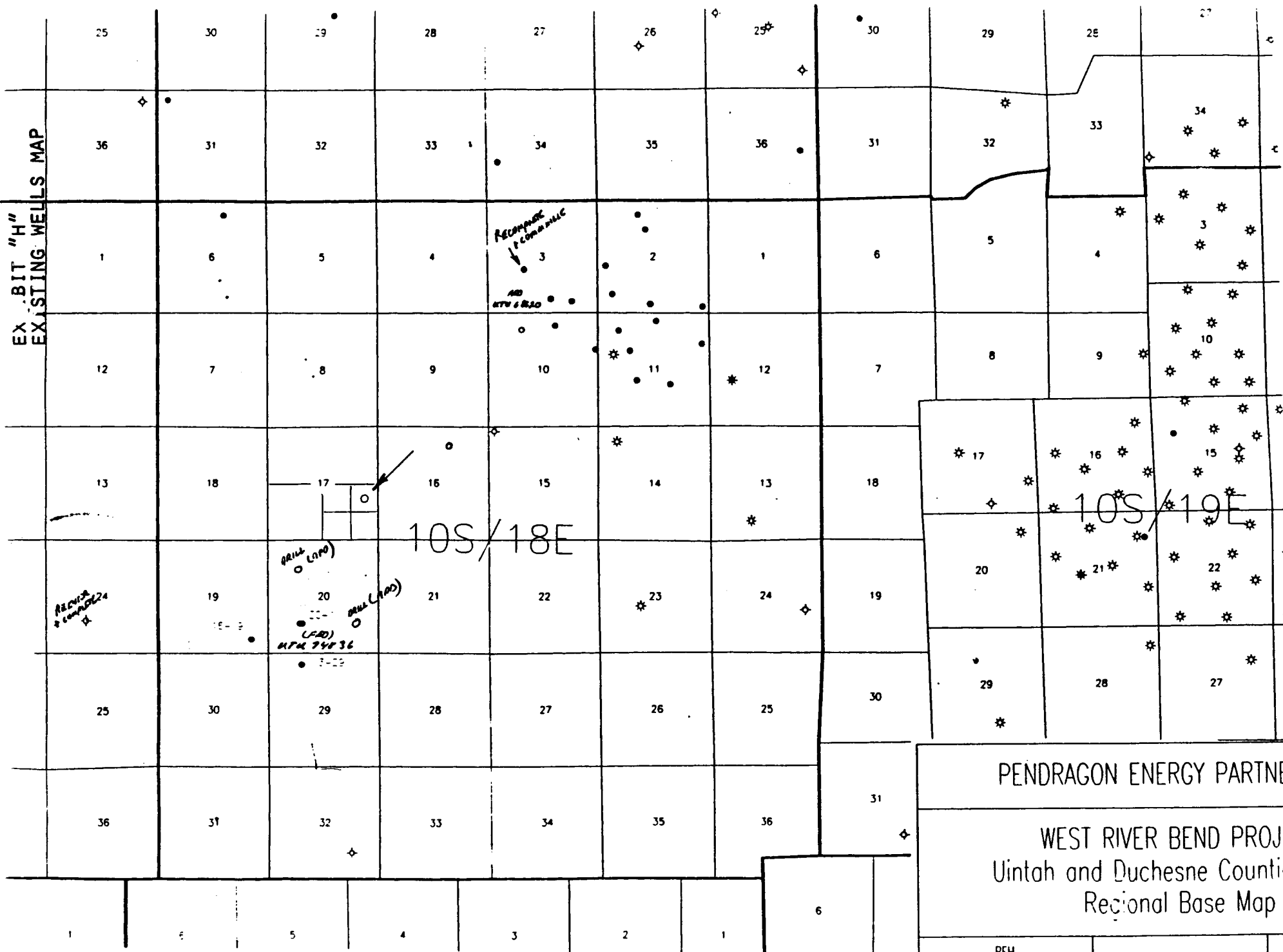
SCALE: 1" = 50'

DRAWN BY: J.R.S.

DATE: 4-11-01

Tri State
Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078
(435) 781-2501

EXISTING WELLS MAP



PENDRAGON ENERGY PARTNE

WEST RIVER BEND PROJ
 Uintah and Duchesne Counti
 Regional Base Map

REH

scale

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 06/18/2001

API NO. ASSIGNED: 43-047-34135

WELL NAME: FED 9-17-10-18

OPERATOR: PENDRAGON ENERGY PTNRS (N2965)

CONTACT: JOHN LUCHETTA

PHONE NUMBER: 303-296-9402

PROPOSED LOCATION:

NESE 17 100S 180E

SURFACE: 1804 FSL 0752 FEL

BOTTOM: 1804 FSL 0752 FEL

UINTAH

WILDCAT (1)

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-77407

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: GRRV

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

RECEIVED AND/OR REVIEWED:

☒ Plat

☒ Bond: Fed[1] Ind[] Sta[] Fee[]
(No. RLB0001759)

☐ Potash (Y/N)

☐ Oil Shale (Y/N) *190-5 (B) or 190-3

☒ Water Permit
(No. 43-1721)

☐ RDCC Review (Y/N)
(Date:)

☐ Fee Surf Agreement (Y/N)

LOCATION AND SITING:

☐ R649-2-3. Unit

☒ R649-3-2. General

Siting: 460 From Qtr/Qtr & 920' Between Wells

☐ R649-3-3. Exception

☐ Drilling Unit

Board Cause No:

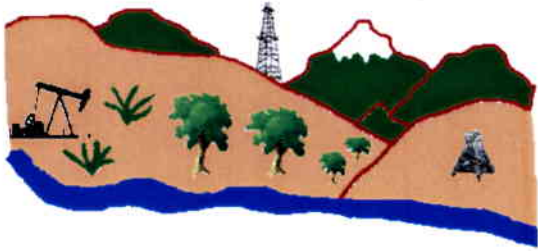
Eff Date:

Siting:

☐ R649-3-11. Directional Drill

COMMENTS:

STIPULATIONS: ① FEDERAL APPROVAL



Utah Oil Gas and Mining

OPERATOR: PENDRAGON ENERGY (N2965)

SEC. 17, T10S, R18E

FIELD: WILDCAT (001)

COUNTY: UINTAH SPACING: R649-3-2/GEN ST

T10S R18E

FEDERAL 24-7 #1
DRL GW / 12700'



FEDERAL 12-17 #1
APD GW / 12700'



STATE 1-18-10-18
DRL OW / 5000'



RIVER BEND U 8-16D



FED 9-17-10-18
NEW OW / 5000'



FED 2-20-10-18
NEW OW / 5000'



DESERT SPRING 10-20-10-18
APD OW / 5000'



DESERT SPRINGS 20-1



DESERT SPRING 16-19-10-18



DESERT SPRING 3-29-10-18



PREPARED BY: LCORDOVA
DATE: 20-JUNE-2001

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route; that I am familiar with the conditions which recently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the proposed operations herein will be performed by Pendragon Energy Partners, Inc., its contractors and subcontractors, Pendragon Energy Partners, Inc. will operate the lease under Flood & Peterson Federal Bond #RL B0001759. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

5. Lease Serial No.
UTU77407

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
Federal #9-17-10-18

9. API Well No.
43-047-34135

10. Field and Pool, or Exploratory
Exploratory - wildcat

11. Sec., T., R., M. or Blk. and Survey or Area
**NE-SE Sec 17, T10S, R18E
S.L.B. & M.**

12. County or Parish
Uintah

13. State
Utah

1a. Type of Work: ☒ DRILL

☐ REENTER

1b. Type of Well: ☒ Oil Well

☐ Gas Well

☐ Other

☐ Single Zone

☐ Multiple Zone

2. Name Of Operator

Pendragon Energy Partners, Inc.

3a. Address

621 17th Street, Suite 750, Denver CO 80293

3 b. Phone No. (include area code)

303 296 9402

4. Location of Well (Report location clearly & in accordance w/State requirements*)

At Surface **752' FEL, 1,804' FSL, Sec 17-T10S-R18E S.L.B. & M.**

At proposed prod zone **Same**

14. Distance in miles and direction from nearest town or post office *

29.7 miles from Myton, Utah

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drlg. unit line, if any)

752'

16. No. of Acres in lease
40

DIV OF OIL, GAS & MINING

17. Spacing Unit dedicated to this well

18. Distance from proposed location
to nearest well drilling, completed,
applied for in this lease, ft.

19. Proposed Depth
5,000'

20. BLM/BIA Bond No. on file
RLB0001759

21. Elevations (Show whether D, KDB, RT, GL etc.)

5,281' GL

22. Approximate date work will start*

Aug 15, 2001

23. Estimated Duration

20 days

24. Attachments

The following, completed in accordance with the requirements of On shore Oil and Gas Order No.1 shall be attached to this form:

1. Well plat certified by a registered surveyor. **Exhibit "A"**
2. A Drilling Plan **Exhibit "B"**
3. A Surface Use Plan (if the location is on National forest System Lands, the **Exhibit D** SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above). **RLB0001759**
5. Operator certification. **Exhibit "D" & as above**
6. Such other site specific information and/or plans as may be required by the authorized officer. **Exhibits "C"/"E"/"F"/"G"/ and "H"**

25. Signature

John Luchetta

Name (Printed /Typed)

John Luchetta

Date

June 15, 2001

Title

Agent

**Federal Approval of this
Action is Necessary**

Approved by (Signature)

Bradley G. Hill

Name (Printed/Typed)

**BRADLEY G. HILL
RECLAMATION SPECIALIST III**

Date

06-26-01

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212 make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* Instructions on reverse side

Exhibits: **A: Survey Plat**
B: 10-Point Plan

C: BOP Diagram
D: 13 Point Surface Use Plan
E: Access Road Maps A&B

F: Location Layout
G: Rig & Cut/Fill Layouts
H: Existing Wells Map

13. OPERATOR'S REPRESENTATIVES AND CERTIFICATION:

	ADDRESS	PHONE #	FAX #	HOME #
Al Nicol	621 17 th Street, Suite 750 Denver, CO 80293	303 296 9402	303 296 9410	303 425 4115
John Luchetta	2020 Foothills Rd. Golden, CO 80401	303 278 3347	303 278 9506	303 278 3347

14. GOVERNMENT CONTACTS:

	ADDRESS	PHONE #	
Stanely R. Olmstead	170 South 500 East Vernal, Utah	435 781 4400	435 781 4410

- Certification:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the proposed operations herein will be performed by Pendragon Energy Partners, Inc. , its contractors and subcontractors. Pendragon Energy Partners, Inc. will operate the lease under Flood & Peterson Federal Bond #RLB0001759. This statement is subject to the provisions of 18 U. S. C. 1001 for the filing of a false statement.

A complete copy of the approved Application for Permit to Drill will be furnished to the operator's field representative to ensure compliance and will be on location during all construction, drilling and completion operations.

Please be advised that Pendragon Energy Partners, Inc. is considered to be the operator of Well No. 9-17-10-18 NE SE Sec 17, T10S, R18E; Lease Desert Spring Federal ; Uintah County, Utah; and is responsible under the terms and conditions of the lease for operations conducted upon the leased lands. Bond coverage is provided by Flood & Peterson Federal Bond #RL B0001759.

June 15, 2001

Date



John Luchetta
Pendragon Energy Partners, Inc.
John Luchetta, Agent



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Kathleen Clarke
Executive Director

Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

June 26, 2001

Pendragon Energy Partners, Inc.
621 - 17th St, Suite 750
Denver, CO 80293

Re: Federal 9-17-10-18 Well, 1804' FSL, 752' FEL, NE SE, Sec. 17, T. 10 South, R. 18 East,
Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-34135.

Sincerely,

A handwritten signature in black ink, appearing to read 'J.R. Baza', written over a large, stylized 'S' shape.

John R. Baza
Associate Director

er

Enclosures

cc: Uintah County Assessor
Bureau of Land Management, Vernal District Office

Operator: Pendragon Energy Partners, Inc.
Well Name & Number Federal 9-17-10-18
API Number: 43-047-34135
Lease: UTU 77407

Location: NE SE **Sec.** 17 **T.** 10 South **R.** 18 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

1. Type of Well: OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> OTHER:	5. Lease Designation and Serial Number: UTU 229477 74407
2. Name of Operator: PENDRAGON ENERGY PARTNERS, INC.	6. If Indian, Allocated or Tribe Name:
3. Address and Telephone Number: 621 17TH STREET, #750, DENVER, CO 80293 303-296-9402	7. Unit Agreement Name
4. Location of Well Footage: 752' FEL, 1804' FSL (NESE) DQ, Sec., T., R., M.: SECTION 17, T10S, R18E	8. Well Name and Number: FEDERAL #9-17-10-18 9. API Well Number: 43-047-34135 10. Field and Pool, or Wildcat: UTELAND BUTTE County: UINTAH State: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT (Submit in Duplicate)

- | | |
|--|---|
| <input type="checkbox"/> Abandon | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Repair Casing | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans | <input type="checkbox"/> Recomplete |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Reperforate |
| <input type="checkbox"/> Fracture Treat or Acidize | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Multiple Completion | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Other _____ | |

Approximate date work will start _____

SUBSEQUENT REPORT (Submit Original Form Only)

- | | |
|---|---|
| <input type="checkbox"/> Abandon * | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Repair Casing | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans | <input type="checkbox"/> Reperforate |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Fracture Treat or Acidize | <input type="checkbox"/> Water Shut-Off |
| <input checked="" type="checkbox"/> Other <u>REQUEST ONE YEAR EXTENSION</u> | |

Date of work completion _____

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.

* Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

PENDRAGON ENERGY PARTNERS, INC. HEREBY REQUESTS A ONE YEAR EXTENSION TO DRILL THIS WELL.

RECEIVED

AUG 30 2002

DIVISION OF
OIL, GAS AND MINING

13. Alan B. Nicol
 Name & Signature: ALAN B. NICOL Title: PRESIDENT Date: 8/27/02

(This space for State use only)

9-4-02
CHD

(See Instructions on Reverse Side)

Approved by the
Utah Division of
Oil, Gas and Mining

Date: 09-04-02

By: Bradley

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER**

RECEIVED

JUN 25 2001

Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route; that I am familiar with the conditions which recently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the proposed operations herein will be performed by Pendragon Energy Partners, Inc., its contractors and subcontractors, Pendragon Energy Partners, Inc. will operate the lease under Flood & Peterson Federal Bond #RL B0001759. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

5. Lease Serial No.

UTU77407
74407

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

Federal #9-17-10-18

9. API Well No.

10. Field and Pool, or Exploratory

Exploratory

11. Sec., T., R., M. or Blk. and Survey or Area

NE-SE Sec 17, T10S, R18E

S.L.B. & M.

12. County or Parish

Uintah

13. State

Utah

1a. Type of Work: ☒ **DRILL**

☐ **REENTER**

1b. Type of Well: ☒ **Oil Well**

☐ **Gas Well**

☐ **Other**

☐ **Single Zone**

☐ **Multiple Zone**

2. Name Of Operator

Pendragon Energy Partners, Inc.

3a. Address

621 17th Street, Suite 750, Denver CO 80293

3 b. Phone No. (include area code)

303 296 9402

4. Location of Well (Report location clearly & in accordance w/State requirements*)

At Surface **752' FEL, 1,804' FSL, Sec 17-T10S-R18E S.L.B.&M.**

At proposed prod zone **Same**

14. Distance in miles and direction from nearest town or post office *

29.7 miles from Myton, Utah

15. Distance from proposed* location to nearest property or lease line, ft.
(Also to nearest drlg. unit line, if any)

752'

16. No. of Acres in lease

40

17. Spacing Unit dedicated to this well

18. Distance from proposed location to nearest well drilling, completed, applied for in this lease, ft.

19. Proposed Depth

5,000'

20. BLM/BIA Bond No. on file

RLB0001759

21. Elevations (Show whether D, KDB, RT, GL etc.)

5,281' GL

22. Approximate date work will start*

Aug 15, 2001

23. Estimated Duration

20 days

24. Attachments

The following, completed in accordance with the requirements of On shore Oil and Gas Order No.1 shall be attached to this form:

1. Well plat certified by a registered surveyor. **Exhibit "A"**
2. A Drilling Plan **Exhibit "B"**
3. A Surface Use Plan (if the location is on National forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). **Exhibit D**

4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above). **RLB0001759**

5. Operator certification. **Exhibit "D" & as above**

6. Such other site specific information and/or plans as may be required by the authorized officer. **Exhibits "C"/"E"/"F"/"G"/ and "H"**

25. Signature

John Luchetta

Name (Printed /Typed)

John Luchetta

Date

June 15, 2001

Title

Agent

Approved by (Signature)

Howard B. ...

Name (Printed/Typed)

Date

09/06/2001

Title

**Assistant Field Manager
Mineral Resources**

Office

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212 make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*Instructions on reverse side

**Exhibits: A: Survey Plat
B: 10-Point Plan**

**C: BOP Diagram
D: 13 Point Surface Use Plan
E: Access Road Maps A&B**

**F: Location Layout
G: Rig & Cut/Fill Layouts
H: Existing Wells Map**

DCGM

CONDITIONS OF APPROVAL
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Pendragon Energy Partners, Inc.

Well Name & Number: Federal 9-17-10-18

API Number: 43-047-34135

Lease Number: U-77407

Location: NESE Sec. 17 T.10S R.18E

Agreement: N/A

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

A. DRILLING PROGRAM

1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report ALL water shows and water-bearing sands to John Mayers or Pete Sokolosky of this office **prior to setting the next casing string or requesting plugging orders**. Faxed copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

2. Pressure Control Equipment

Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

3. Casing Program and Auxiliary Equipment

As a minimum, the cement top behind the production casing must extend at least 200 ft. above the top of the Green River/ Uinta Formation contact. This contact has been tentatively identified at $\pm 730'$

4. Mud Program and Circulating Medium

None

5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the AO.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Written notification of such must be submitted to this office not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring

as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

A schematic facilities diagram as required by 43 CFR 3162.7-5(d) shall be submitted to the appropriate Field Office within 60 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5 (1).

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

7. Other Information

The geologic evaluation indicates that minor amounts of H₂S gas has been found in wells drilled in sections 10 and 19 of the same township. The operator needs to be aware of this so that adequate safety procedures can be initiated if H₂S is found while drilling this well.

All loading lines will be placed inside the berm surrounding the tank battery.

All off-lease storage, off-lease measurement, or commingling onlease or off-lease will have prior written approval from the AO.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries and tested for meter accuracy at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approvals are necessary, you must contact one of the following individuals:

Ed Forsman (435) 828-7874
Petroleum Engineer

Kirk Fleetwood (435) 828-7875
Petroleum Engineer

Jerry Kenczka (435) 646-1676
Petroleum Engineer

BLM FAX Machine (435) 781-4410

EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

Unused fracturing fluids or acids

Gas plant cooling tower cleaning wastes

Painting wastes

Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids

Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste

Refinery wastes

Liquid and solid wastes generated by crude oil and tank bottom reclaimers

Used equipment lubrication oils

Waste compressor oil, filters, and blowdown

Used hydraulic fluids

Waste solvents

Waste in transportation pipeline-related pits

Caustic or acid cleaners

Boiler cleaning wastes

Boiler refractory bricks

Incinerator ash

Laboratory wastes

Sanitary wastes

Pesticide wastes

Radioactive tracer wastes

Drums, insulation and miscellaneous solids.

SURFACE USE PROGRAM
Conditions of Approval (COAs)

Existing Access Roads:

Map "A" the vicinity map shows access routes not from Red Wash, Utah but Myton, Utah.

Access Roads to be Constructed:

Access to Well No. 2-20-10-18 shall be modified to prevent road from being on ridge by moving the route slightly to east. Access to Well No. 9-17-10-18 shall be modified at a point about 400 feet south of location to move it west to avoid the Federally listed Uinta Basin Hookless cactus. The construction worker developing each of these routes shall make a field inspection with an authorized officer of the BLM prior to construction to assure they understand the specific modifications necessary to minimize negative impacts to natural resources.

Existing and/or Proposed Facilities

If a pipeline is requested for this location additional authorization will be necessary.

If out side construction material is needed for containment dikes or road development the operator will obtain prior approval from the authorized officer.

Noxious weeds and other non-native species would be controlled on the well site and along the access road by application of herbicides or by hand removal.

Methods for Handling Waste Disposal:

The reserve pits shall be lined with a 12 mil plastic liner. The pit will have sufficient bedding (either straw or dirt) to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc..., that could puncture the liner will be disposed of in the pit.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Plans For Reclamation Of Location

All seeding for reclamation operations at each of these locations shall use the following seed mixture:

shadscale	Atriplex confertifolia	3 lbs/acre
bud sage	Artemisia spinescens	3 lbs/acre
Indian rice grass	Oryzopsis hymenoides	3 lbs/acre
galleta grass	Hilaria jamesii	3 lbs/acre

The seed mixture shall be drilled but if the seed mixture is to be aerially broadcasted, the pounds per acre shall be doubled. All seed poundages are in Pure Live Seed.

Immediately after construction the stockpiled top soil will be seeded and the seed worked into the soil by "walking" the pile with caterpillar tracks.

The seed mixture for reclamation with the APD will not be used and annual rye grass will not be put on the topsoil stockpiles.

Other Information:

No construction is allowed March 1 through July 15 due to ferruginous hawk nesting in the area. If nesting is not initiated by May 31 and is confirmed by the field office biologist construction may be initiated after May 31. A hospital muffler or multi-cylinder engine shall be used on pump unit motors to reduce noise levels.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

PENDRAGON ENERGY PARTNERS, INC.

3a. Address 621 17TH STREET, #750
DENVER, CO 80293

3b. Phone No. (include area code)
303-296-9402

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

752' FEL, 1804' FSL (NE SE)
SECTION 17, T10S, R18E

5. Lease Serial No.

UTU 77407

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

FEDERAL #9-17-10-18

9. API Well No.

43-047-34135

10. Field and Pool, or Exploratory Area

UTELAND BUTTE

11. County or Parish, State

UINTAH, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other REQUEST
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	ONE YEAR
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	EXTENSION

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

PENDRAGON ENERGY PARTNERS, INC. HEREBY REQUESTS A ONE YEAR EXTENSION TO DRILL THIS WELL.

RECEIVED

SEP 25 2002

DIVISION OF
OIL, GAS AND MINING

RECEIVED

SEP 3 2002

CONDITIONS OF APPROVAL ATTACHED

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

ALAN B. NICOL

Title PRESIDENT

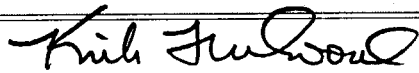
Signature



Date 8/27/02

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by



Petroleum Engineer

Date 9/18/02

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

uDOGm

Pendragon Energy Partners
APD Extension

Well: Federal 9-17-10-18

Location: NESE Sec. 17, T10S, R18E

Lease: UTU 77407

CONDITIONS OF APPROVAL

An extension for the referenced APD is granted with the following conditions:

1. The extension will expire September 6, 2003
2. No other extensions beyond that time frame will be granted or allowed.

If you have any other questions concerning this matter, please contact Kirk Fleetwood or Ed Forsman of this office at (435) 781-4400.

ENTITY ACTION FORM

Operator: PENORAGON ENERGY PARTNERS, INC.

Operator Account Number: N 2965

Address: 621 17th ST. # 750

DENVER CO. 80293

Phone Number: 303-296-9402

Well 1

API Number	Well Name	QQ	Sec	Twp	Rng	County
43-047-34760	DESERT SPRING 2-30-10-18	SW/NE	30	10S	18S	LLINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date		
A	99999	13731	2/4/03	2-26-03		
Comments:						

Well 2

API Number	Well Name	QQ	Sec	Twp	Rng	County
43-047-34135	FED. 9-17-10-18	NE/SE	17	10S	18E	LLINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date		
A	99999	13732	1-30-03	2-26-03		
Comments:						

Well 3

API Number	Well Name	QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date		
Comments:						

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

ALAN B. NICOL
Name (Please Print)
[Signature]
Signature
PRESIDENT
Title
2/18/03
Date

RECEIVED

FEB 20 2003

DIV. OF OIL, GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WELL COMPLETION OR RECOMPLETION REPORT & LOGFORM APPROVED
OMB NO. 1004-0137
Expires: November 30, 20001a. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Otherb. Type of completion: ☐ New Well ☒ Work Over ☐ Deepen ☐ Plug Back ☐ Diff Resrvr.,
Other2. Name of Operator **Pendragon Energy Partners, Inc.**3. Address **621 17th St.; Suite 750; Denver, CO 80293**

3a. Phone No. (include area code)

4. Location of Well (Report location clearly and in accordance with any State requirements) *

At surface **752' FEL; 1804' FSL NE SE Sec 17**At top prod. interval reported below **Same**

At total depth

14. Date Spudded
Mar 02, 0315. Date T. D.
Reached **Mar 9, 03**16. Date Completed **7-15-03**
☐ D & A ☒ Ready to Prod. ☐9. API Well No.
43-047-3413510. Field and Pool, or Exploratory
Uteland Buttes11. Sec., T., R., M., on Block and
Survey or Area **Sec 17 T10S-R18E**12. County or Parish **Uintah** 13. State **Utah**17. Elevations (DF, RKB, RT, GL)
5281' GL18. Total Depth: **4930** MD **4930'** PBDT **4869'** TVD **Same**20. Depth Bridge Plug Set: MD
TVD21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
HRI, SDDSN, GR-CBL (Mailed under separate cover)
3-14-03 6-23-0322. Was well cored? ☒ No ☐ Yes (Submit analysis)Was DST run? ☒ No ☐ Yes (Submit report)Directional Survey? ☒ No ☐ Yes (Submit Copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12 14"	8 5/8	24 J	0	271'		200 Sk	40 bbl	Surface	
7 7/8"	5 1/2"	17 J	0	4930'		530 Sk	170 bbl	+/- 300'	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 7/8"	4825'	4599'	5 1/2"		Anchor			

25. Producing Intervals

Formation	Top	Bottom	Perforated	Size	No. Holes	Perf.
A) "C" Shoal	4789'	4803'	4799-4803'	0.4"	4 spf	
B) "A" Sand	4671'	4676'	4671-4676'	0.4"	4 spf	
C)						

26. Perforation Record

27. Acid, Fracture Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
4799-4803'	Sand Frac w/339 bbls + 10K# 16-30 frac sand.
4671-4676'	Sand Frac w/350 bbls + 25K# 16-30 frac sand.

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
8-01-03	8-01-03	24	54	54	tstn		35		Conventional lift equipment
Choke Size	Tbg Press Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
								Pumping (comingled in the well bore)	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									Conventional lift equipment
Choke Size	Tbg. Press. Flwg. SI.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
								Pumping (commingled in the well bore)	

RECEIVED
AUG 18 2003
D.V. OF OIL & GAS

28b. Production - Interval C

Date First Produced 8-03	Test Date 8-01-03	Hours Tested 24	Test Production 54	Oil BBL 54	Gas MCF tstm	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method Artificial lift
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status Pumping	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Descriptions, Contents, etc.	Name	Name	Measured Depth
Green River	1240'				
"C" Shoal	4797'				
"A" Sand	4670'				

32. Additional remarks (include plugging procedure):

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd) 2. Geological Report 3. DST Report 4. Directional Survey
5. Sundry Notice for plugging and cement verification 6. Core Analysis 7. Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (Please Print) **John Luchetta** Title **Agent**
Signature *John Luchetta* Date **Aug 12, 2003**

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORT ON WELLS
Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No. **U-74407**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
Uteland Buttes

8. Well Name and No.
Federal 9-17-10-18

9. API Well No.

10. Field, and Pool, or Exploratory Area
Wildcat

11. County or Parish, State
Uintah, Utah

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Pendragon Energy Partners, Inc.

3. Address of Operator
601 17th St, Suite 750; Denver, CO 80293

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
752' FEL; 1804' FSL, Sec 17-T10S-R18E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	Completion

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection).

July 3, 03 MIRU completion tools & equipment. PBDT @ 4854'.

July 5, 03 Perforate Shoal section 4799-4803' w/ 4 spf. Sand Frac perforations 10,700 # w/339 bbls treated water. Pump rate = 19.5 bpm @ 1850 psi.

July 7, 03 Swb test 4 bfph, 25 % oil w/ 200 bbl load to recover. Set composite dbp @ 4740'.

July 10, 03 Perfroate A Sand @ 4671-76' w/ 4spf. Frac perfroations 350 bbls + 25 k# 16-30 frac sand. @ 30 bpm @ 2200 psi.

July 14, 03 Terminate swab for cleanup and install production string. 2 7/8" Tubing @ 4825' and 1 1/2' pump @ 4793'.

July 15, 03 Instal surface production equipment.

Aug 1, 03 Initial pump rate @ 54 bopd

AUG 18 2003

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed) **John Luchetta**

Title **Agent**

Signature

John Luchetta

Date

Aug 12, 2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

December 15, 2003

Mr. Dan Jackson
Groundwater Program
Groundwater Program, Mail Code 8P-W-GW
U.S. Environmental Protection Agency
999 18th Street, Suite 500
Denver, Colorado 80202-2466

RE: Pendragon Energy Partners
Federal 9-17-10-18, UIC Permit Application
1804' FSL & 752' FEL, Sec. 17, T10S, R18E
Uintah County, Utah

Dear Mr. Jackson:

Attached is the permit application and supporting documents to convert the existing oil well to an injection well for enhanced recovery. This well is located in the Uteland Butte Field which falls within the Uncompahgre portion of the Uintah and Ouray Indian Reservation.

Geologically this area is very similar to the Greater Monument Butte Unit in which the EPA has permitted hundreds of injection wells. Please contact me with any questions you may have.

Sincerely,
BUYS & ASSOCIATES, INC.



Martin W. Buys
Agent for Pendragon Energy Partners

**Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY**



United States Environmental Protection Agency
**Underground Injection Control
 Permit Application**
*(Collected under the authority of the Safe Drinking
 Water Act. Sections 1421, 1422, 40 CFR 144)*

I. EPA ID Number

T/A

C

U

*Read Attached Instructions Before Starting
 For Official Use Only*

Application approved mo day year	Date received mo day year	Permit Number	Well ID	FINDS Number

II. Owner Name and Address

III. Operator Name and Address

Owner Name Pendragon Energy Partners			Operator Name		
Street Address 621 17th Street			Phone Number 303-296-9402		Street Address
City Denver			State Co.	ZIP CODE 80202	City
			State	ZIP CODE	

IV. Commercial Facility

V. Ownership

VI. Legal Contact

VII. SIC Codes

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Private	<input checked="" type="checkbox"/> Owner
<input checked="" type="checkbox"/> No	<input type="checkbox"/> Federal	<input type="checkbox"/> Operator
	<input type="checkbox"/> Other	

VIII. Well Status (Mark "x")

<input type="checkbox"/> A. Operating	Date Started mo day year	<input checked="" type="checkbox"/> B. Modification/Conversion	<input type="checkbox"/> C. Proposed

IX. Type of Permit Requested (Mark "x" and specify if required)

<input checked="" type="checkbox"/> A. Individual	<input type="checkbox"/> B. Area	Number of Existing Wells	Number of Proposed Wells	Name(s) of field(s) or project(s)

X. Class and Type of Well (see reverse)

A. Classes(es) (enter codes(s))	B. Type(s) (enter codes(s))	C. If class is "other" or type is code 'x,' explain	D. Number of wells per type (if area permit)
II	R	N/A	N/A

XI. Location of Well(s) or Approximate Center of Field or Project

XII. Indian Lands (Mark 'x')

Latitude		Longitude		Township and Range				Feet From		Line		Feet From		Line	
Deg	Min	Sec	Deg	Min	Sec	Sec	Twp	Range	1/4 Sec	Feet From	Line	Feet From	Line		
						17	10 S	18 E	SE	1804	S	752	E	<input checked="" type="checkbox"/> Yes Uncompahgre	
															<input type="checkbox"/> No Ouray

XIII. Attachments

(Complete the following questions on a separate sheet(s) and number accordingly; see instructions)
 For Classes I, II, III, (and other classes) complete and submit on a separate sheet(s) Attachments A--U (pp 2-6)
 as appropriate. Attach maps where required. List attachments by letter which are applicable and are included with
 your application.

XIV. Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

A. Name and Title (Type or Print) Alan Nicol, President	B. Phone No. (Area Code and No.) 303-296-9402
C. Signature 	D. Date Signed Dec. 6, 2003

UNDERGROUND INJECTION CONTROL
PERMIT APPLICATION

Federal 9-17-10-18 WELL
752' FEL & 1804' FSL
SEC. 17, T10S, R18E
Uintah County, Utah
API # 43-047-34135

December 15, 2003

Prepared for:

Mr. Dan Jackson
Groundwater Program, Mail Code 8P-W-GW
U.S. Environmental Protection Agency
999 18th Street, Suite 500
Denver, Colorado 80202-2466

Prepared by:

BUYS & ASSOCIATES, INC.
300 E. Mineral Ave., Suite 10
Littleton, Colorado 80122
(303) 781-8211
FAX (303) 781-1167

Federal 9-17

LIST OF ATTACHMENTS

Attachment No. 1	Area Map
Attachment No. 2	Site Map, Site Map with 1/4 mile radius
Attachment No. 3	Cross-Section, Structure Map,
Attachment No. 4	Summary Sheet of Casing and Cement Jobs
Attachment No. 5	Water Analysis
Attachment No. 6	List of Producing Wells
Attachment No. 7	Ownership Map & List of Owners, Affidavit Notification
Attachment No. 8	Fracture Gradient Review
Attachment No. 9	Cement Bond Log
Attachment No. 10	Open Hole Log
Attachment No. 11	Summary of Completion Data
Attachment No. 12	Injection Wellbore Diagram
Attachment No. 13	P&A Procedure
Attachment No. 14	MIT Procedure

SUMMARY DOCUMENT
UIC WELL APPLICATION
Federal 9-17-10-18
API # 43-047-34135

The following document contains information provided in support of the application for the conversion of the Federal 9-17-10-18 Well to a water injection well in the Green River Formation in the Uteland Butte Field, Uintah County, Utah.

The Uteland Butte field falls within the Uncompahgre portion of the Uintah and Ouray Indian reservation and is within Indian Country. Therefore, for facilities located in the Uncompahgre portion of the reservation, only EPA-issued UIC permits are necessary for compliance with SDWA UIC regulations.

- (1) Pendragon Energy Partners (Pendragon) is the operator and major working interest owner of wells located in the Uteland Butte Field, Uintah County, Utah. Pengragon's business address is provided below:

Pendragon Energy Partners
621 17th Street
Denver, CO 80293
303.296.9402

- (2) Enclosed as Attachment No. 1 (Area Map), is a plat of the southern portion of the Uteland Butte Field, identifying all wells located in this area. The legal location for the Federal 9-17-10-18 Well is 752' FEL & 1804' FSL, SEC. 17, T10S, R18E.
- (3) Attachment No. 2 is a plat of the well. Shown on the plat is a circle of one-quarter mile radius centered on the Federal 9-17 Well. The 1/4 mile radius encompasses the area of the review, within which Pendragon is required to investigate all wells for mechanical integrity. The 1/4 mile radius also identifies those lands, the owners there of, who must be provided notice of this application. There are no other wells in this 1/4 mile radius.
- (4) Pendragon proposes to utilize the Federal 9-17 as an injection well for enhanced recovery in the Uteland Butte Field.
- (5) Structure - The Uteland Butte field is near the center of the broad, gently northward-dipping south flank of the Uintah Basin. The beds dip about 200 ft./mile. There are no folds or faults in the beds at the surface.

Stratigraphy - Lower part of the Uintah Formation (Eocene)

The lower 600-800 feet of the Uintah Formation forms the surface in the Uteland Butte field.

It consists of brown, lenticular fluvial sandstones, 5 to 20 feet thick, interbedded with varicolored shales, some of which are limey. The alluvial deposits of the Uintah are intertongued with the upper beds of the Green River Formation.

Green River Formation (Eocene)

The Green River Formation is approximately 3700 feet thick in the Uteland Butte field. It consists of lacustrine shales and marginal lacustrine sandstones and limestones. These beds were deposited on the broad, level floor of Lake Uintah as the lake expanded and contracted many times across the nearly level, broad margins of the lake basin.

Some of the marker beds in the Green River Formation in the Uteland Butte field are:

Horse Bench sandstone, occurs at a depth of about 1200 feet.

Mahogany Oil Shale Bed, occurs at a depth of about 1650 feet.

H Marker, occurs at a depth of about 2650 feet.

X Marker, occurs at a depth of about 3200 feet.

Top of the Douglas Creek member and the Black Shale member occurs at a depth of about 3900 feet. It contains numerous beds of limestone, shale and sandstone

Top of the Uteland Butte limestone occurs at a depth of about 4500 feet and it is about 180 feet thick.

The "A Sand," into which it is proposed to inject water, occurs 40-50 feet below the top of the Uteland Butte limestone as shown on Cross Sections A-B and C-D.

However, the "A sand" is replaced by shale in well #7-19 (log on Cross Section A-B) and water will not be injected into it in that well.

The "C shoal" limestone, into which it is proposed to inject water, occurs at the base of the Uteland Butte limestone in the Uteland Butte field as shown on Cross Sections A-B.

Pendragon cut the core through the "C shoal" limestone in well #14-17 (SE/SW Sec. 17, T.10 S., R. 18 E.) as shown on Cross Section C-D. The core is 30 feet long and started at 4675ft. The description by Roger Hively is summarized as follows:

- 1.4 ft. black Shale
- 2.1 ft. limestone, ostracodal
- 0.5 ft. coal, alginiate
- 4.9 ft. standstone, tight with calcareous
- 4.3 ft. shale, black
- 4.7 ft. standstone, tight
- 1.2 ft. shale, black
- 1.6 ft. limestone, ostracodal
- 0.4 ft. shale, brown with ostracodes
- "C shoal" 4.1 ft. limestone, ostracodal
- 0.8 ft. sandstone, tight
- 0.5 ft. silstone

The contact between Green River Formation and the Wasatch Formation is an intertonguing of red shales and lacustrine shales and limestones. The "C shoal" limestone is the basal unit of the Green River formation in the Uteland Butte field.

Wasatch Formation (Eocene and Paleocene)

The Wasatch Formation is approximately 2400 feet thick in Uteland Butte and consists of red alluvial shales and siltstones with scattered lenticular fluvial sandstones usually 10-50 feet thick.

The Wasatch is underlain in gradational contact by the North Horn Formation Which overlies the Mesaverde Group, about 3000 feet thick, and the Mancos Shale, about 5000 feet thick.

- (6) Confining Zones - Cross Sections A-B and C-D show the logs of the proposed water injection wells and the oil wells southwest and northeast of them. The water will be injected into the A sand and the C shoal. These beds are in the lower part of the Green River Formation which is about 3700 feet thick in the field and consists of shales, sandstones and limestones that were deposited in lake Uintah and on its shores. These beds cover the entire modern Uintah Basin as the lake repeatedly expanded and contracted across the board, nearly flat southern flank of the basin.

The marginal lacustrine sandstones were deposited as streams meandered across the margins and flowed into the deeper part of the basin, north of Uteland Butte. These sands are lenticular as exemplified by the A sand. On the Cross Sections the interval can be correlated, but the sand is absent in wells #7-19 and #2-20 on Cross Section A-B. The sands are enclosed by shales which confine the oil within them. The beds beginning about 20 feet above A sand are predominantly black shale with thin interbedded tight sandstones. These impervious beds are continuous across the entire field and fall beyond. They provide confining zones for water that will be injected into the A sand.

The 110-120 foot interval between the A sand and the C shoal contains 2 to 3 porous sandstones enclosed by black shale. These sandstones do not contact the A sand or the C shoal, they are confined within the shales which also form confining zones for the A sand and the C shoal. The A sand and the C shoal stay in their respective stratigraphic positions and do not cut across bedding to contact other possibly permeable beds. Similar sedimentary environment existed in the Greater Monument Butte field north of Uteland Butte in T 8-9 S. There numerous water injection projects have shown that the injected water stays in the sandstones and does not escape because of the confining lacustrine shales.

Below the C shoal the beds are predominantly shales and siltstones of the Wasatch Formation. These impervious beds provide an excellent confining zone below the C shoal.

The shales and limestones are made up of very fine particles of clay and precipitates that formed continuous beds over very large areas on the nearly flat lake bottom and provide excellent permeability barriers, in aggregate confining zones.

- (7) The injection intervals in the Federal 9-17 will be from 4670-4677' (A sand) and from 4800-4803' (C shoal). These two areas are the oil and gas productive zones in this well bore. The perforations are at a rate of 4 shots per foot.

Attachment No. 4 is a summary sheet for the casing and cement jobs for this well.

- (8) USDW - There are no sources of underground drinking water near the Federal 9-17 Well. The Green River is about 5 miles southeast of the Federal 9-17.

Enclosed as Attachment No. 5 are standard analyses of produced water from currently producing wells in this field. The analysis of the Green River formation water from the state 1-16 is 29,530 mg/L of total dissolved solids and from the Federal 3-29 is 37,511 mg/L of the total dissolved solids. This is above the 10,000 ppm value utilized as the upper threshold for "fresh water."

Gwynn2 reports analyses of waters from five drill stem tests in the Green River Formation from well in NW/NW Sec. 14, T. 10 S., R. 18 E., two miles ENE of the wells on Cross Section C-D (see index Map on Cross Section). In this well the top of Green River Formation is at 470 feet and the Mahogany Bed is at 1900 feet. The top of Wasatch is at 4865 feet.

The DSTs were at depths of 3676-3681 ft., 3681-3746 ft., 3877-3915 ft., 4045-4080 ft., and 4275-4287 ft. The Total Dissolved Solids in the waters from those tests ranged from 62,784 to 76,590 ppm. The waters contained about 50% chloride, 30% sodium and 5% sulfate. These waters are typical of waters from Green River Formation throughout the Uintah Basin, and these test intervals are about the same depth in the Uteland Butte field.

- (9) A summary of completion data from the Federal 9-17 Well is included in Attachment No. 11.
- (10) The Cement Bond Log is included in Attachment No. 9. The CBL log shows 90% or better bond from 4260' to 4846'.
- (11) The open hole log for the Federal 9-17 is included in Attachment No. 10
- (12) The sundries for the completion of the Federal 9-17 are included in Attachment No. 11.

1 Howells, L, M.S. Longson and G.L. Hunt, 1987, U.S. Geological Survey Open File Report 87-394 and State of Utah Department of Natural Resources Publication No. 92, 59 p., 2 pls.

2 Gwynn, J.W., 1995, Resistivities and Chemical Analyses of Selected Oil and Gas Field, water well and spring waters, Utah; Utah Geological Survey Circular 87, 142p.

- (13) Initially, the source of water for injection will come from a water well to be drilled within the field. The well will be drilled to about 4000' into the Green River Formation. This part of the formation yields water that is about 10,000-80,000 ppm TDS.

Once the water flood is underway, the volume of produced water will increase in the producing wells. This increased produced water will also be used in the flood injection operations.

Once the water source well is drilled and completed, compatibility testing will be conducted between the formation water and source water.

- (14) A list of wells that may use the Federal 9-17 Well for disposal is included in Attachment No.6.

- (15) Enclosed as Attachment No. 7 is a list of all the owners, operators, and surface interest owners located within 1/4 mile radius of the Federal 9-17.

Also included is a signed affidavit certifying that Pendragon has notified all of the operators, and surface interest owners located within 1/4 mile radius of the Federal 9-17 Well.

- (16) A fracture gradient review is contained in Attachment No. 8. Pendragon proposes to inject water, to enhance oil production, into subsurface beds in the Federal 5-20 Well. The water will be injected into the "A sand" (where present) and the "C shoal" limestone. The table in the discussion summarizes the depths of these beds and the "fracture gradient" as determined by Halliburton from hydraulic fracturing conducted to improve the permeability of the beds.

The average fracture gradient is 0.89 to 0.90 psi/ft. Pendragon is requesting an injection pressure of 1300 psi and an injection rate of 400 BWPD per zone.

- (17) An injection wellbore diagram is contained in Attachment No. 12.

- (18) The P&A procedure for this well is contained in Attachment No. 13.

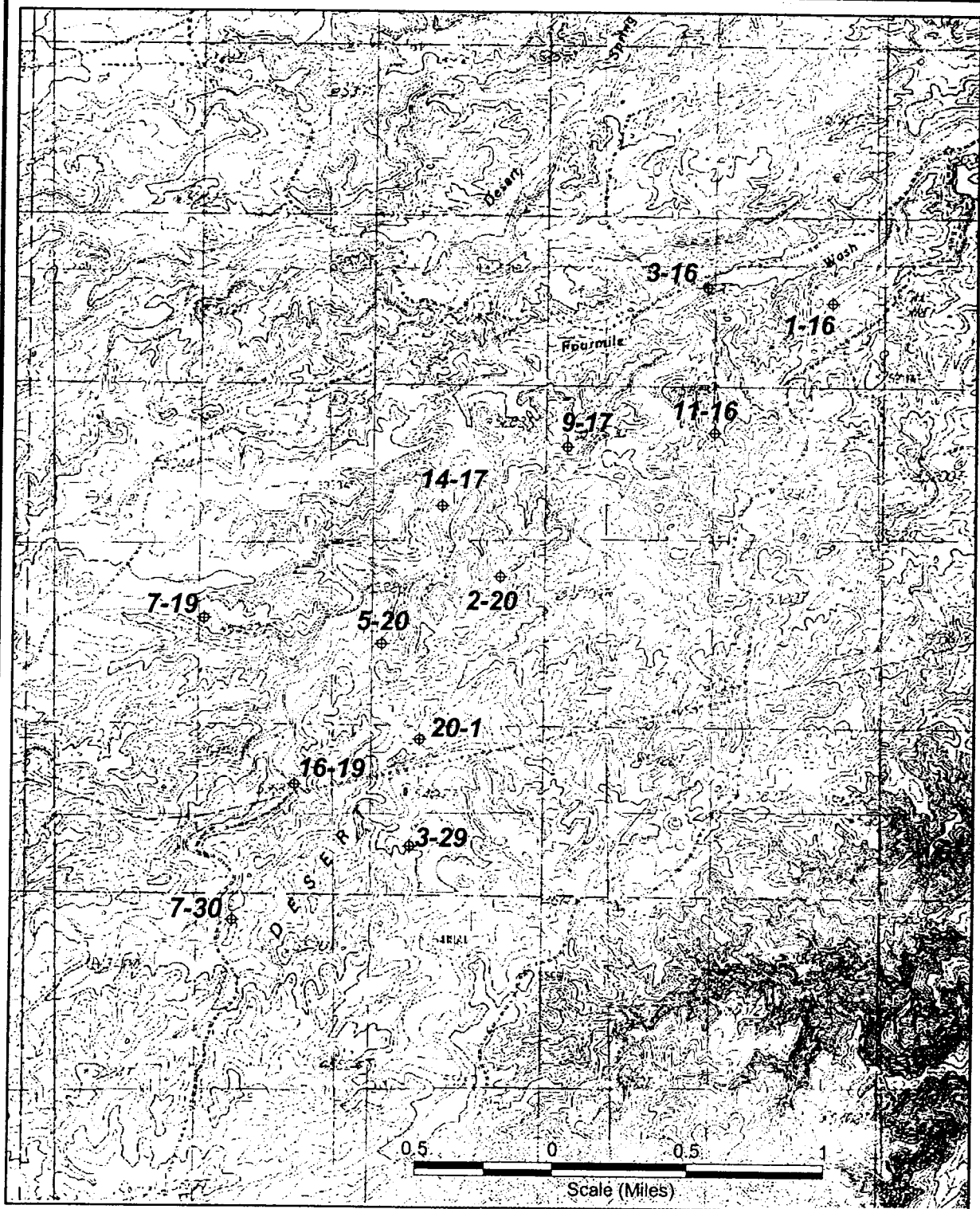
- (19) Once the draft permit is issued, Pendragon will conduct an MIT test and a static bottom-hole pressure test. The conversion work will be completed and submitted on EPA Form 7520-12. A wellbore schematic will be included with this form.

- (20) Pendragon will post a surety bond to demonstrate financial responsibility. The amount of the bond will be provided by the EPA once the permit is approved.

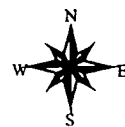
- (21) Pendragon will install various gauges on the well so that the injection pressure and the tubing casing annulus pressures can be measured. The well will be equipped with a flow meter with a cumulative volume recorder.

ATTACHMENT NO. 1

AREA MAP



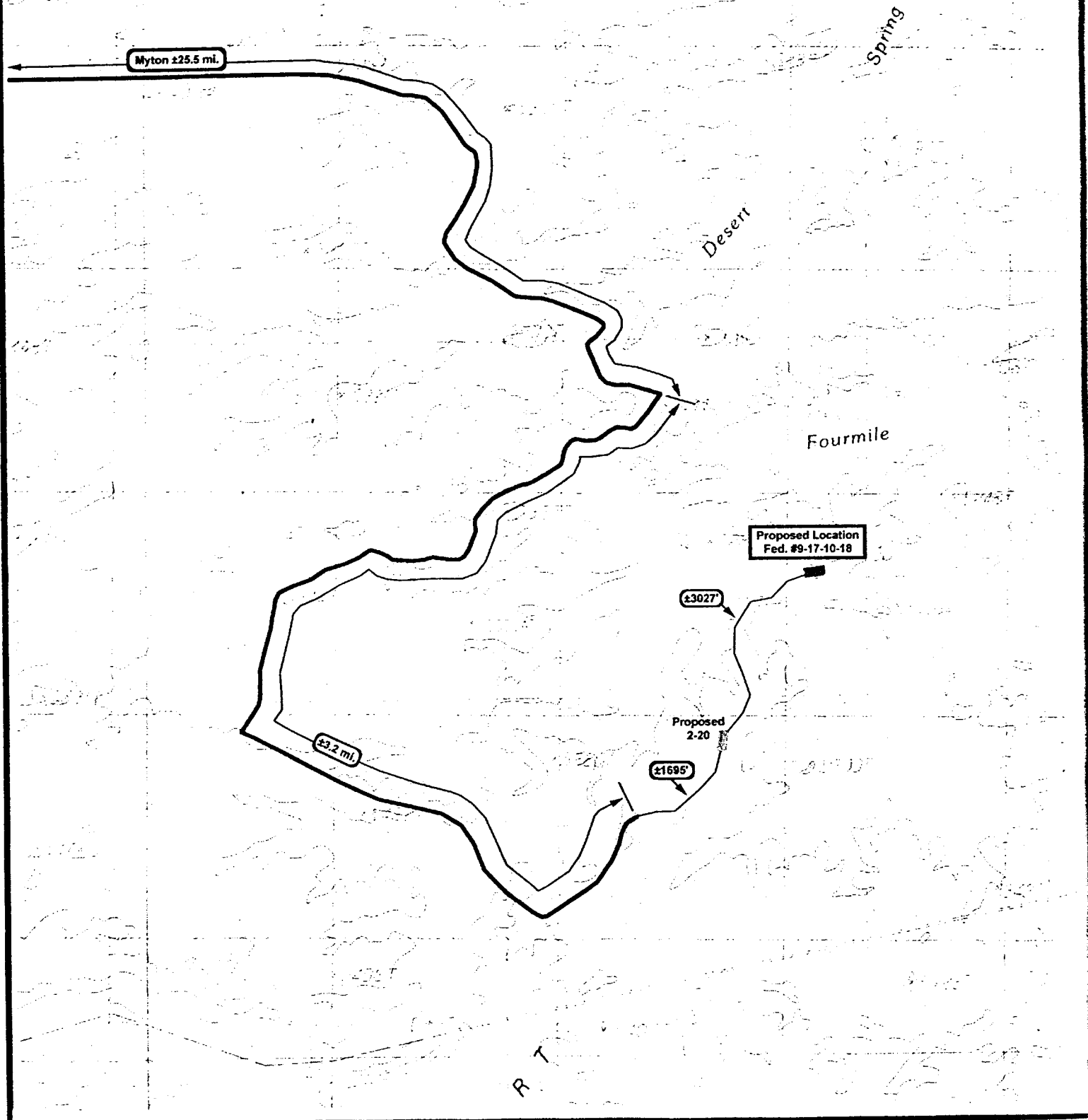
Uteland Butte Field
Sec. 16, 17, 19, 20, 29, 30 T10S R18E
Uintah County, Utah



ATTACHMENT NO. 2

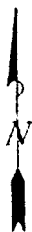
SITE DIAGRAM

**RADIUS MAP OF
ADJACENT WELLS**



PENDRAGON
ENERGY PARTNERS INC.

Federal #9-17-10-18
SEC. 17, T10S, R18E, S.L.B.&M.

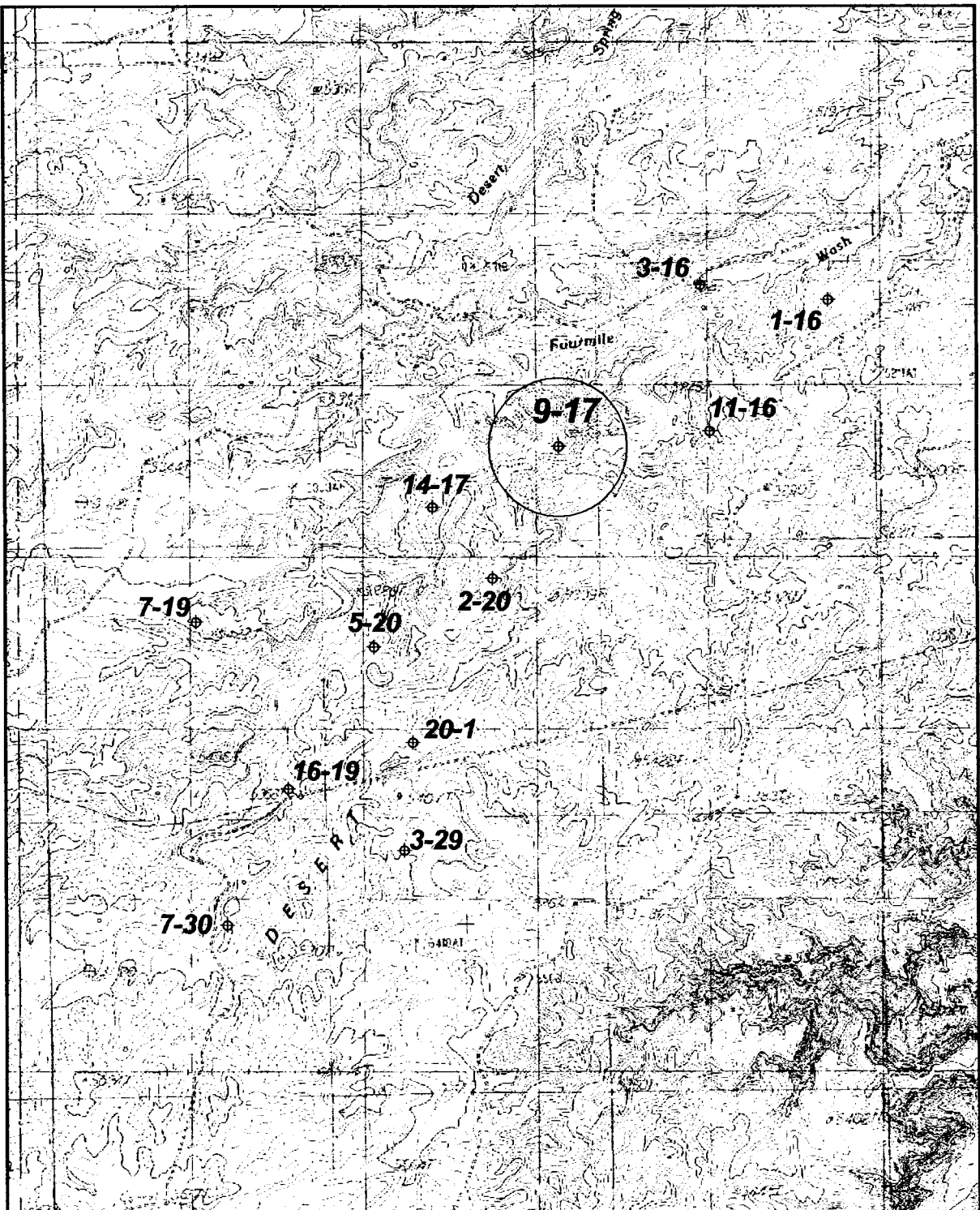


Tri-State
Land Surveying Inc.
(435) 781-2501
38 West 100 North Vernal, Utah 84078

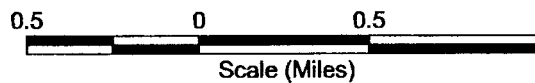
SCALE: 1" = 2000'
DRAWN BY: bgm
DATE: 04-12-2001

Legend
— Existing Road
— Proposed Access

TOPOGRAPHIC MAP
"B"



Well, with 1/4
Mile Radius Buffer



Federal 9-17-10-18 NE/SE Sec. 17 T10S R18E

ATTACHMENT NO. 3

CROSS-SECTION, STRUCTURE MAP

***THE CROSS SECTION MAPS ARE THE SAME
FOR ALL FOUR WELLS***

ATTACHMENT NO. 4

**SUMMARY SHEET OF CASING
AND CEMENT JOBS**

	SURFACE CASING				PRODUCTION CASING			
WELL	SIZE	DEPTH	CEMENT AMOUNT	CEMENT TOP	SIZE	DEPTH	CEMENT AMOUNT	ESTIMATED CEMENT TOP
FEDERAL 9-17	8 5/8, 24#	0-283'	150 CF Lite 100CF premium	SURFACE	5 1/2, 15.5#	0-4846'	340 sx Lite, 190 sx premium. 530 total	114'

WELL	A SAND PERFORATIONS	C SHOAL PERFORATIONS	CBL	LOGGED INTERVAL	CEMENT BOND
FEDERAL 9-17	4670-4677'	4800-4803'	YES	100-4846'	90%- 4260-4545', 90%-4547-4674',90%-4676-4742', 90%-4746-4846'

ATTACHMENT NO. 5

WATER ANALYSIS

Analytical Laboratory Report for:
Pendragon



**BJ Unichem
Chemical Services**

UNICHEM Representative: **S.L. Hoopes**

Production Water Analysis

Listed below please find water analysis report from: ~~9-17~~ ¹⁻¹⁶, WH

This is the 1-16 well. It was read upside down when it was done originally.

Lab Test No: **2003402623** Sample Date: **09/21/2003**
Specific Gravity: **1.020**
TDS: **29530**
pH: **7.80**

Cations:	mg/L	as:
Calcium	320	(Ca ⁺⁺)
Magnesium	97.00	(Mg ⁺⁺)
Sodium	12443	(Na ⁺)
Iron	3.60	(Fe ⁺⁺)
Manganese	0.40	(Mn ⁺⁺)
Anions:	mg/L	as:
Bicarbonate	366	(HCO ₃ ⁻)
Sulfate	0	(SO ₄ ⁼⁼)
Chloride	16300	(Cl ⁻)
Gases:		
Carbon Dioxide		(CO ₂)
Hydrogen Sulfide	0	(H ₂ S)



**DownHole SAT™ Scale Prediction
@ 160 deg. F**

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO ₃)	10.15	2.04
Aragonite (CaCO ₃)	8.29	1.99
Witherite (BaCO ₃)	0	-15.35
Strontianite (SrCO ₃)	0	-7
Magnesite (MgCO ₃)	5.15	-1.53
Anhydrite (CaSO ₄)	0	-603.49
Gypsum (CaSO ₄ *2H ₂ O)	0	-880.99
Barite (BaSO ₄)	0	-12.06
Celestite (SrSO ₄)	0	-216.88
Silica (SiO ₂)	0	-108.84
Brucite (Mg(OH) ₂)	.0202	-1.27
Magnesium silicate	0	-157.43
Siderite (FeCO ₃)	239.89	1.92
Halite (NaCl)	.00266	-204136
Thenardite (Na ₂ SO ₄)	0	-64972
Iron sulfide (FeS)	0	-.00927

Interpretation of DHSat Results:

The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The scale is logarithmic, i.e. a Saturation Index of 3 is 10 times more saturated than a value of 2.

The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) infinity to positive (precipitating) infinity. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

Analytical Laboratory Report for:
Pendragon



**BJ Unichem
Chemical Services**

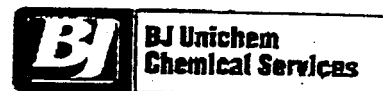
UNICHEM Representative: S.L. Hoopes

Production Water Analysis

Listed below please find water analysis report from: 3-29, WH

Lab Test No: 2003402822 Sample Date: 09/21/2003
Specific Gravity: 1.025
TDS: 37511
pH: 6.30

Cations:	mg/L	as:
Calcium	480	(Ca ⁺⁺)
Magnesium	146	(Mg ⁺⁺)
Sodium	13961	(Na ⁺)
Iron	1.40	(Fe ⁺⁺)
Manganese	0.20	(Mn ⁺⁺)
Anions:	mg/L	as:
Bicarbonate	122	(HCO ₃ ⁻)
Sulfate	100	(SO ₄ ⁻²)
Chloride	22700	(Cl ⁻)
Gases:		
Carbon Dioxide		(CO ₂)
Hydrogen Sulfide	0	(H ₂ S)



DownHole SAT™ Scale Prediction @ 160 deg. F

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO ₃)	10.15	2.04
Aragonite (CaCO ₃)	8.29	1.99
Witherite (BaCO ₃)	0	-15.35
Strontianite (SrCO ₃)	0	-7
Magnesite (MgCO ₃)	5.15	-1.53
Anhydrite (CaSO ₄)	0	-603.49
Gypsum (CaSO ₄ *2H ₂ O)	0	-880.99
Barite (BaSO ₄)	0	-12.06
Celestite (SrSO ₄)	0	-216.88
Silica (SiO ₂)	0	-108.84
Brucite (Mg(OH) ₂)	.0202	-1.27
Magnesium silicate	0	-157.43
Siderite (FeCO ₃)	239.89	1.92
Halite (NaCl)	.00266	-204136
Thenardite (Na ₂ SO ₄)	0	-64972
Iron sulfide (FeS)	0	-.00927

Interpretation of DHSat Results:

The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The scale is logarithmic, i.e. a Saturation Index of 3 is 10 times more saturated than a value of 2.

The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) infinity to positive (precipitating) infinity. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

ATTACHMENT NO. 6
LIST OF PRODUCING WELLS

PROPOSED DESERT SPRING UNIT

List of Existing Wells (All are oil wells with associated gas)

All in Uintah County, Utah

Well Name	Qtr/Qtr	Section	T&R
Pendragon State 1-16-10-18	NE/NE	16	10S-18E
Pendragon State 3-16-10-18	NE/NW	16	10S-18E
Pendragon State 11-16-10-18	NE/SW	16	10S-18E
Pendragon Federal 9-17-10-18	NE/SE	17	10S-18E
Pendragon Federal 14-17-10-18	SE/SW	17	10S-18E
Pendragon Federal 7-19-10-18	SW/NE	19	10S-18E
Pendragon Federal 16-19-10-18	SE/SE	19	10S-18E
Pendragon Federal 2-20-10-18	NW/NE	20	10S-18E
Pendragon Federal 5-20-10-18	SW/NW	20	10S-18E
Pendragon Federal 20-1	NE/SW	20	10S-18E
Pendragon Federal 3-29-10-18	NE/NW	29	10S-18E
Pendragon Federal 7-30-10-18	SW/NE	30	10S-18E

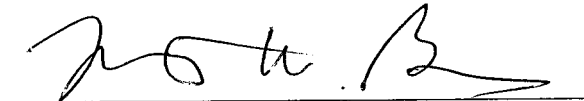
ATTACHMENT NO. 7

**OWNERSHIP MAP &
LIST OF OWNERS,
AFFIDAVIT NOTIFICATION**

AFFIDAVIT OF MAILING

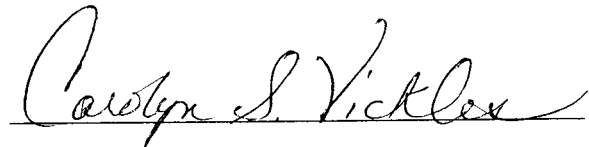
I, Martin W. Buys, President, Buys & Associates, Inc., being first duly sworn, depose and state as follows; On December 15, 2003, I caused to be mailed by certified mail, postage prepaid, return receipt requested, a copy of the Application to convert the Federal 9-17-10-18 well to water injection for enhanced recovery. It was sent to all parties who have an interest within 1/4 mile from this well. The attached list contains the names of all parties who were notified.

Dated this 15th day of December, 2003



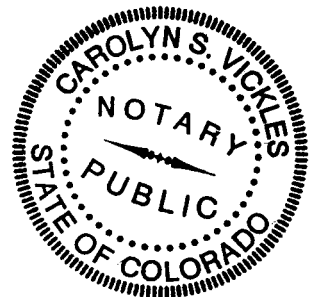
Martin W. Buys
President
Buys & Associates, Inc.

The forgoing affidavit was subscribed and sworn to before me by Martin W. Buys.
This 15 day of December, 2003



_____, Notary Public

My Commission expires: 30 day of October, 2006



December 6, 2003

CERTIFIED MAIL NO.

Mineral, Surface and Working Interest Owners

RE: Notification of Water Injection
Federal 9-17-10-18
752' FEL, 1804' FSL, Section 17, T10S, R18E
Uintah County, Utah

To Whom it May Concern;

On December 6, 2003, Pendragon Energy Partners submitted to the Environmental Protection Agency an application requesting approval to convert the above mentioned well to a water injection well in an enhanced recovery program.

Anyone who would be directly and adversely affected by the authorization of the underground disposal into the Green River (4589'-4724') may file a written request for a public hearing before the EPA. Logs and additional information on the subject well are on file with the EPA, Groundwater Program, Mail Code 8P-W-GW, 999 18th Street, Suite 500, Denver, Colorado 80202-2466.

Please contact Marty Buys at 303.781.8211 if you have any questions.

Sincerely,

Martin W. Buys
Agent for Pendragon Energy Partners

Enclosure

DIVISION OF INTERESTS
Pendragon 5-20-10-18 Well
Section 20-T10S-R18E
Uintah County, Utah
REVISED
As of 10/1/03
SHOWING QUESTAR JOINDER

OWNER	W.I.BPO	N.R.I.BPO	W.I. APO	N.R.I. APO	TYPE
Pendragon Energy Partners, Inc. 621 17 th Street, Suite 750 Denver, Co. 80293 84-1419088	.05000	.04250	0.05000	0.04250	W.I.
Questar Exploration & Production Company 1050 17 th Street #500 Denver, Co. 80265 84-1310390 (Billing address)	0.21875	0.1815625	0.21875	0.1815625	W.I.
III Exploration Company P.O. Box 7608 Boise, Idaho 83707	0.28125	0.2334375	0.28125	0.2334375	W.I.
Patriot Exploration Co., Inc. 45 Rockefeller Plaza, Suite 2090 New York, New York 10111	0.36750	0.312375	0.36750	0.312375	W.I.
Robert Bomar 2821 W. Shandon Midland, Texas 79705 457-78-8837	0.0125	0.010625	0.01250	0.010625	W.I.
Joseph Deitch 12 Claridge Drive Weston Mass. 02493 027-38-6672	0.028125	0.02390625	0.028125	0.02390625	W.I.
O. Alan & Molly W. Jared 58009 Morton Marathon, Florida 33050 417-54-2570	0.006875	0.00584375	0.006875	0.00584375	W.I.
Steven Rooney & Gail Queeney 930 Emerald Row Gulfstream, Florida 33483 173-46-5715	0.02125	0.0180625	0.02125	0.0180625	W.I.
Peter T. Wheeler 111 Rolling Lane Weston, Mass. 02193 - 2474 014-36-3557	0.01375	0.0116875	0.01375	0.0116875	W.I.
Minerals Management Service			0.125	0.125	ROY

Royalty Management Program
P.O. Box 5810 T.A.
Denver, Colorado 80217

Patina Oil & Gas Corporation 1625 Broadway, Suite 2000 Denver, Co. 80202 75-2629477	0.025	0.025	ORRI
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Roger Hively 6745 W. 3 rd Place Lakewood, Co. 80226 275-52-5969	0.005	0.005	ORRI
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Patricia McDonald Chandler P.O. Box 5005 Rancho Mirage, Calif. 92270 519-34-4711	0.005	0.005	ORRI
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ATTACHMENT NO. 8

FRACTURE GRADIENT REVIEW

FRACTURE GRADIENT

Pendragon proposes to inject water, to enhance oil production, into subsurface beds in the following four wells in the Uteland Butte field, T10S, R18E:

1. #5-20
2. #11-16
3. #9-17
4. #7-19

The water will be injected into the "A sand" (where present) and the "C shoal" limestone. The following table summarizes the depths of these beds and the "fracture gradient" as determined by Halliburton from hydraulic fracturing conducted to improve the permeability of the beds.

Well	"A sand" Depth Perforated	Fracture Gradient psi/ft	"C shoal" Depth Perforated	Fracture Gradient psi/ft
1. #5-20	4588-4596	0.90	4718-4724	0.90
2. #11-16	4617-4623	0.89	4743-4747	0.89
3. #9-17	4670-4677	0.64	4800-4803	sanded out
4. #7-19	not present		4788-4792	sanded out

The "A sand" and the "C shoal" were hydraulically fractured in four wells, in the Uteland Butte field, into which water will not be injected. The fracture gradient as determined by Halliburton from those procedures are given in the table below.

5. #7-30	not present		4623-4628	0.91
6. #2-20	not present		4779-4782	0.88
7. #3-16	not present		4800-4808	sanded out
8. #14-17	4564-4575	0.91	4694-4698	0.84

Assuming a frac gradient of 0.90 psi/ft and depths of 4588 ft. to 4803 ft. for the points of injection, pressures of 4129 psi to 4323 psi would fracture the A sand and the C shoal in the four injection wells. Water columns to those depths will place pressures of 1973 psi to 2065 psi on the injection formations. Injection pressures up to 1956 psi into the A sand and 2058 psi into the C shoal will place pressures on the injected beds of 200 psi less than the pressure that would fracture the beds.

ATTACHMENT NO. 9

CEMENT BOND LOG

OPEN HOLE LOGS CAN BE FOUND AT

***PENDRAGON ENERGY PARTNERS
621 17TH STREET, SUITE 750
DENVER, CO. 80202***

AND

***U.S. ENVIRONMENTAL PROTECTION AGENCY
999 18TH STREET, SUITE 500
DENVER, CO. 80202***

ATTACHMENT NO. 10

OPEN HOLE LOG

ATTACHMENT NO. 11

COMPLETION DATA

Pendragon Energy Partners Daily Completion/Workover Report

Well: Federal 9-17

Date: 7/15/03

Section: 17	Township: 10	Range: 18	County: Uintah	State: Utah
TD:	PBTD: 4853.5'	KB:	GL:	Casing Size:
				Wt Range - #/Ft.
TOC:	Perfs: "C" SHOAL 4799' - 4803', "A" SAND 4671' - 76'			Depth:

Present Operation: (ADJUSTED PBTD 4853.5')

Details: TP 15 PSI. CP 15 PSI. ND BOPS & 5000# TBGHD. NU PRODUCTION TBGHD.

HOOK UP HOT OIL UNIT. FLUSHED TBG W / 40 BBLs PRIOR TO RUNNING PUMP & RODS.

PU CENTRAL HYDRAULICS 25-150-RHBC, 12' - 4' - 13' - 16' MAX STROKE 128" TOP HOLD

DOWN PUMP & RIH AS FOLLOWS FROM TOP DOWN:

1-1/2" X 22' Polish Rod, One 4' x 3/4" Pony Rod, 192 3/4" x 25' New Sucker Rods,

2-1/2" x 1-1/2" x 16' Top Hold Down Pump

PRESSURED BH PUMP TO 600 PSI & HELD PRESS FOR 5 MIN. BH PUMP

TESTED OK. HOOK UP HORSE HEAD TO PMPG UNIT & POLISH ROD & SPACE PUMP. TOOK

3.6 BBLs TO HIT PRESSURE INDICATING FLUID IN TBG 1100' FR SFC. WILL MOVE OUT

WTR TANK, MUD PUMP AND RIG IN AM.

Operations Supervisor: IB LUECK

Pendragon Energy Partners Daily Completion/Workover Report

Well: Federal 9-17

DATE: 7/14/03

Section: 17	Township: 10	Range: 18	County: Uintah	State: Utah
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TD:	PBSD: 4869'	KB:	GL:	Casing Size:	Wt Range - #/Ft.
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TOC:	Perfs: "C" SHOAL 4799' - 4803', "A" SAND 4671' - 76'	Depth:
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Present Operation:

Details: (ADJUSTED PBSD 4857.5')

TP 15 PSI, CP 35 PSI. TAGGED BTM, HAD 10' 9" OF SAND IN RAT HOLE. ADJUSTED PBSD IS NOW 4869' - 10' 9" (SAND) - 9" (UNDRILLED BP) = 4857.5'. PULLED BTM OF TBG TO EST. 4630'. RU HOT OIL UNIT, TREATED WORK TANK. HAD 115 BBLs OIL AND 20 BBLs WTR. NU TO SWAB. SWB WOULD NOT START IN HOLE. PMPD 20 BBLs HOT OIL IN TBG. RAN SWAB. HIT FLUID @ 1200' ? FLUID LEVEL. SWABBED AS FOLLOWS:

TIME	FLUID LEVEL	BBL	CUM BBL	LTR	REMARKS
8:00 AM	1200'?	-	-	286.8	FL AFTER HOT OIL
9:30	2000'	50.6			MAKING GOOD GAS.
10:30	2700'	15.4	66.0		CHANGED SWB CUP @ 10:15, NO SAND
11:30	3400'	15.4	81.4		CHANGED OIL SAVER RUBBER
					CHANGED SWB CUP, NO SAND
12:30 PM	4000'	17.6	99.0		
1:30	4000'	13.2	112.2		
1:45	4000'				SHUT DOWN TO PULL TBG.

Operations Supervisor: IB LUECK

(CONTINUED)

Pendragon Energy Partners Daily Completion/Workover Report

Well: Federal 9-17 (CONTINUED) (REVISED)
Date: 7/14/03

Section: 17	Township: 10	Range: 18	County: Uintah	State: Utah
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TD:	PBSD: 4853.5'	KB:	GL:	Casing Size:	Wt Range - #/Ft.
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TOC:	Perfs: "C" SHOAL 4799' - 4803', "A" SAND 4671' - 76'	Depth:
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Present Operation:

Details: ND SWAB. TAGGED BTM. FOUND ADDITIONAL 4' OF SAND FILL (TOTAL OF 14' OF SAND IN RAT HOLE. ADJUSTED PBSD 4853.5'. TOOH W / TBG & BIT. TIH W / TBG PRODUCTION STRING AS FOLLOWS:

PARTIAL K.B.	8.30	8.30
152 JTS 2-7/8" 6.5# 8 RD EUE L&J SERVICE TBG	4587.84	4596.14
ANCHOR / CATCHER	2.75	4598.87
3 JTS TBG	193.47	4792.36
3V	1.09	4793.45
1 JT TBG	31.22	4824.67
NOTCHED COLLAR	.44	4825.11

HOT OIL WORK TANK THIS PM. TRANSFERRED 30 BBLS TO STOCK TANK. THIS AM 85 BBLS TO STOCK TANK, TOTAL 185 BBLS. SION

Operations Supervisor: IB LUECK

Pendragon Energy Partners Daily Completion/Workover Report

Well: Federal 9-17				Date: 7/13/03	
Section: 17	Township: 10	Range: 18	County: Uintah	State: Utah	
TD:	PBSD: 4869'	KB:	GL:	Casing Size:	Wt Range - #/Ft.
TCC:	Perfs: "C" SHOAL 4799' - 4803', "A" SAND 4671' - 76'				Depth:

Present Operation:

Details: BTM OF TBG 4822', TBG & CSG VOL 101.9 BBLS (2.11 BBLS / 100')

TP 0 PSI, CP 25 PSI. 1ST SWB RUN HIT FLUID @ 700'. VERY THICK OIL & WTR. TOOK

SWB 30 MIN TO FALL TO 1400'. PULLED SWB & REC 4.4 BBLS. TOOK OFF SWB CUPS &

RAN TO 3500'. TOOK 40 MIN TO FALL TO 3000', THEN FELL FREE TO 3500'. TRIED TO RUN

SWB W / CUPS. SWB WOULD NOT GO. NU RIG PUMP. CIRC DOWN CSG. PMPD 17 BBLS

& GOT RETURNS OUT OF TBG. PMPD +/- 22 BBLS, MOSTLY HEAVY OIL & WTR, THEN

WENT TO CLEAR WTR. PMPD +/- 8 BBLS CLEAR WTR, THEN TURNED BACK TO HEAVY

OIL & WTR & GAS, PMPD +/- 20 BBLS OF THIS MIXTURE & QUIT PMPG. (DID NOT WANT TO

GET COOLER WTR FROM TOP OF CSG ANNULUS TO BTM OF HOLE. LOST 4.4

BBLS WHILE CIRC. TOTAL LOAD NOW ESTIMATE 361.4

RESUMED SWBG & SWBD AS FOLLOWS:

(CONTINUED)

Operations Supervisor: IB LUECK

Pendragon Energy Partners Daily Completion/Workover Report

Well: Federal 9-17 (CONTINUED)

Date: 7/13/03

Section: 17	Township: 10	Range: 18	County: Uintah	State: Utah
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TD:	PBSD: 4869'	KB:	GL:	Casing Size:	Wt Range - #/Ft.
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TCC:	Perfs: "C" SHOAL 4799' - 4803', "A" SAND 4671' - 76'	Depth:
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Present Operation:

Details:	FLUID	TOTAL
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TIME	LEVEL	BBL	BBL TODAY	REMARKS
10:00 AM	SF	0	0	SAMPLE ON 1ST PULL, 10% OIL
11:00	1500	50.6	50.6	5% OIL 1ST PULL AFTER 11:00, SWB
				TRIED TO STOP. 2ND RUN WENT SLOW,
				ONLY 2 RUNS BETWEEN 11-12:00
12:00 PM	1600	8.8	59.4	10% OIL, @ 12:00 TRY ONE SWB CUP,
				SWB FALLING BETTER.
1:00 PM	2500	30.8	90.2	15-20% OIL, CHANGED OIL SAVER
				RUBBER & SWB CUP @ 1:00, SWB CUP HAD SAND. ATTEMPTED TO PULL 3 STDS TBG TO
				GET ABOVE TOP PERFS. PULLED 1-1/2 STDS & RIG BROKE HYDRAULIC HOSE (1:15 PM),
				JERRY-RIGGED HOSE & FINISHED 3 STDS OUT (2:45 PM) BTM TBG NOW +/- 4630'. DID
				BETTER JERRY-RIG & RESUMED SWBG @ 3:30 PM.

(CONTINUED)

Operations Supervisor: IB LUECK

Pendragon Energy Partners Daily Completion/Workover Report

Well: Federal 9-17 (CONTINUED)
Date: 7/13/03
Section: 17 Township: 10 Range: 18 County: Uintah State: Utah
TO: PBTD: 4869' KB: GL: Casing Size: Wt Range - #/Ft.
TOC: Perfs: "C" SHOAL 4799' - 4803', "A" SAND 4671' - 76' Depth:
Present Operation:
Details: FLUID TOTAL

TIME	LEVEL	BBL	CUM TODAY	REMARKS
1:15 PM	2700	11.0	101.2	MADE 1 RUN AFTER 1:15 PM
3:30	2700	-	-	RESUMED SWBG 25-30% OIL ON 1ST PULL AFTER 3:30
4:15	2900	17.6	118.8	MADE 2 PULLS
4:30	3100	6.6	125.4	MADE 1 PULL
5:00	3200	8.8	134.2	MADE 1 PULL

WORK TANK FULL OF OIL. HAVE DRAINED OFF ALL WTR. NO MORE ROOM TO SWB.
CHECKED BUCKET SAMPLE. HAD VERY SMALL AMT OF SAND.
**CHECKED SWB CUP AFTER FINAL PULL @ 5:00 PM. NO SAND IN CUP. (HAD MADE 4
RUNS) SION. ROUGH ESTIMATE LTR AFTER ADJUSTING FOR OIL = 258 BBLs.**
Operations Supervisor: IB LUECK

Pendragon Energy Partners Daily Completion/Workover Report**Well: Federal 9-17****Date: 7/12/03****Section: 17****Township: 10****Range: 18****County: Uintah State: Utah****TD:****PBTD: 4869'****KB:****GL:****Casing Size:****Wt Range - #/Ft.****TOC:****Perfs: "C" SHOAL 4799' - 4803', "A" SAND 4671' - 76'****Depth:****Present Operation: DRILL OUT & SWAB****Details: RIH W / 4-3/4" BIT & TBG. TAGGED SAND @ 4520' (220' OF SAND ON PLUG).****(+/- 2900#). RU POWER SWIVEL & MUD PUMP TO CIRC OUT SAND & DRILL OUT PLUG.****CIRC OUT SAND & DRLD OUT COMPOSITE BP @ 4740'. RAN TO PBTD 4869'. GAUGED****TANK. HOLE TOOK 25.9 BBLS WHILE CIRC SAND & DRLG PLUG. TOTAL LOAD NOW****386 BBLS. NU SWAB. BTM OF TBG @ 4822'. VOLUME OF TBG & CSG @ TBG DEPTH****101.9 BBLS. NU SWAB. FL @ SFC ON 1SRT RUN. SWBD 1 - 3/4 HRS, REC 44 BBLS. EST****LTR NOW 342 BBLS. MADE 5 SWB RUNS. FL @ 700' ON LAST 3 RUNS. SION****Operations Supervisor: IB LUECK**

Pendragon Energy Partners Daily Completion/Workover Report

Well: Federal 9-17**Date: 7/11/03****Section: 17****Township: 10****Range: 18****County: Uintah****State: Utah****TD:****PBTD: 4869'****KB:****GL:****Casing Size:****Wt Range - #/Ft.****TOC:****Perfs: "C" SHOAL 4799' - 4803', "A" SAND 4671' - 76'****Depth:****Present Operation: FLOW BACK****Details: JOB WAS COMPLETED. ISIP 1900 PSI, 5 MIN 1780 PSI, 10 MIN 1690 PSI, 15 MIN 1620****PSI, TLTR 424 BBLs. STARTED FLOW BACK AS FOLLOWS:**

TIME	PRESSURE	BBL	CUM BBL	REMARKS
5:45 PM	1600	-	-	START FLOW BACK
6:25	800	41.8	41.8	
6:30	800			SI-DRAIN TANK FOR 5 MIN
7:00	0	35.2	77.0	
7:30	0	0	77.0	WELL DIED
8:00	0	2.2	79.2	WELL DRIBBLING WTR
8:30	0	2.2	81.4	" " "
9:00	0	2.2	83.6	" " "
9:30	0	-	83.6	WELL DIED
10:00	0	-	83.6	WELL DIED

SION**Operations Supervisor: IB LUECK**

Pendragon Energy Partners Daily Completion/Workover Report**Well: Federal 9-17****Date: 7/10/03****Section: 17 Township: 10 Range: 18 County: Uintah State: Utah****TD: PBTD: 4869' KB: GL: Casing Size: Wt Range - #/Ft.****TQC: Perfs: "C" SHOAL 4799' - 4803', "A" SAND 4671' - 76 Depth:****Present Operation: ACIDIZE & FRAC****Details: Waiting on Halliburton****CP 30 PSI. RU HOWCO WIRELINE SERVICES. RIH W / COMPOSITE BP. HIT FLUID @****3300'. SET BP @ 4740'. RIH W / TBG. SET BTM OF TBG @ 4694'. RU HOWCO STIM****SERVICES. SPOTTED 500 GAL 7-1/2% HCL ACID. POOH W / TBG. RIH W / 4" CSG GUN &****PERFED "A" SAND FR 4671' - 76' W / 4 JSPF (21 HOLES). PMPD 500 GAL HCL AS FOLLOWS:****(12 BBLS), PMPD 8 BBLS @ 2 BPM, BROKE @ 2000 PSI TO 900 PSI. PMPD 4 BBLS @ 4****BPM @ 1000 PSI. STARTED FRAC, ESTABLISHED RATE OF 30 BPM @ 2200 PSI. PMPD****APPROX 60-80% OF FRAC @ 30 BPM @ AVG OF 2200 PSI. THEN EQUIPMENT / PERSONNEL****MISCOMMUNICATION CAUSED RATE / PRESSURE TO FLUCTUATE SIGNIFICANTLY****THRU REMAINDER OF JOB (SEE CHARTS).****Operations Supervisor: Ib Lueck**

Pendragon Energy Partners Daily Completion/Workover Report**Well: Federal 9-17****Date: 7/09/03****Section: 17****Township: 10****Range: 18****County: Uintah State: Utah****TD:****PBTD: 4869'****KB:****GL:****Casing Size:****Wt Range - #/Ft.****TCC:****Perfs: "C" SHOAL 4799' - 4803'****Depth:****Present Operation:****Details: Waiting on Halliburton****Operations Supervisor: lb Lueck**

Pendragon Energy Partners Daily Completion/Workover Report

Well: Federal 9-17

Date: 7/08/03

Section: 17	Township: 10	Range: 18	County: Uintah	State: Utah
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TD:	PBTD: 4869'	KB:	GL:	Casing Size:	Wt Range - #/Ft.
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TOC:	Perfs: "C" SHOAL 4799' - 4803'	Depth:
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Present Operation:

Details: TP 20 psi. CP 30 psi. FL on 1st swab run was 4500'. 1st pull looked like all oil. Swbd down & rec 6.6 Bbl by 8:00 AM:

TIME	FLUID LEVEL	BBL	CUM BBL TODAY	CUM BBL	LTR	REMARKS
7:30 AM	4500'	-	-	101.1	209.9	
8:00	4600'	6.6	6.6	107.7	203.3	
9:00	4700'	.4	7.0	108.1	202.9	20% Oil, 1 Pull / Hr.
10:00	4700'	-	7.0	108.1	202.9	No rec., change swb cups.
11:00	4650'	1.1	8.1	109.2	201.8	20% Oil
12:00 noon	4700'	.4	8.5	109.6	201.4	20% Oil
1:00 PM	4700'	.5	9.0	110.1	200.9	20% Oil
2:00	4700'	.4	9.4	110.5	200.5	25% Oil
3:00	4750'	.4	9.8	110.9	200.1	25% Oil

ND swab, pulled tbg. Prep to set BP, perf & frac "A" zone Fri AM. SION

IB LUECK

Pendragon Energy Partners Daily Completion/Workover Report

Well: Federal 9-17

Date: 7/07/03

Section: 17

Township: 10

Range: 18

County: Uintah State: Utah

TD:

PBTD: 4869'

KB:

GL:

Casing Size:

Wt Range - #/Ft.

TOC:

Perfs: "C" SHOAL 4799' - 4803'

Depth:

Present Operation:

Details: DRAINED & SHOVELED SAND OUT OF WORK TANK. RIH W / 2 STANDS TBG.

SN OUT +/- 4780'. NU SWAB & SWBD AS FOLLOWS:

TIME	FLUID LEVEL	BBL	CUM BBL	LTR	REMARKS
10:00 AM	700'	-	-	311.0	CSG & TBG VOL. 88.2 BBLs.
					FEW OIL DROPS ON 1ST PULL
11:00	1300'	44.3	44.3	266.7	WATER
12:00 NOON	2700'	13.3	57.6	253.4	WATER
1:00 PM	3700'	19.9	77.5	233.5	GOOD SHOW OIL
2:00	4000'	8.8	86.3	224.7	6% OIL
3:00	4500'	11.0 *	97.3	213.7	15 % OIL, OIL & FROTH, RATE
					(*OIL FROTHY) TOO HIGH, GO TO 2 PULLS
					PER HOUR
	4500'				FL @ 4500' @ 3:30
4:00	4600'	2.2	99.5	211.5	20% OIL, GO TO 1 PULL/HR
5:00	4700'	.8	100.3	210.7	40% OIL
6:00	4700'	.8	101.1	209.9	50% OIL SION

Pendragon Energy Partners Daily Completion/Workover Report**Well: Federal 9-17****Date: 7/06/03****Section: 17****Township: 10****Range: 18****County: Uintah State: Utah****TD:****PBTD: 4869'****KB:****GL:****Casing Size:****Wt Range - #/Ft.****TOC:****Perfs: "C" SHOAL 4799' - 4803'****Depth:****Present Operation:**

**Details: RIH W / TBG, FOUND SAND + - 4270' (599' FILL), APPROX 7900#. NU & CIRC OUT
SAND. HOLE TOOK EST 10.4 BBLs SINCE FRAC. TOTAL LOAD EST 281 BBLs. CIRC
HOLE CLEAN. LD, TAG JT, 2 SINGLES & PULLED 2 STANDS. LOST + - 30 BBLs WHILE
CIRCULATING SAND. TLTR 311 BBLs. SION**

Operations Supervisor: IB LUECK

Pendragon Energy Partners Daily Completion/Workover Report

Well: **Federal 9-17**Date: **7/05/03**Section: **17**Township: **10**Range: **18**County: **Uintah** State: **Utah**TD: **PBTD: 4869'** KB: **GL:** Casing Size: **Wt Range - #/Ft.**TOC: **Perfs: "C" SHOAL 4799' - 4803'**

Depth:

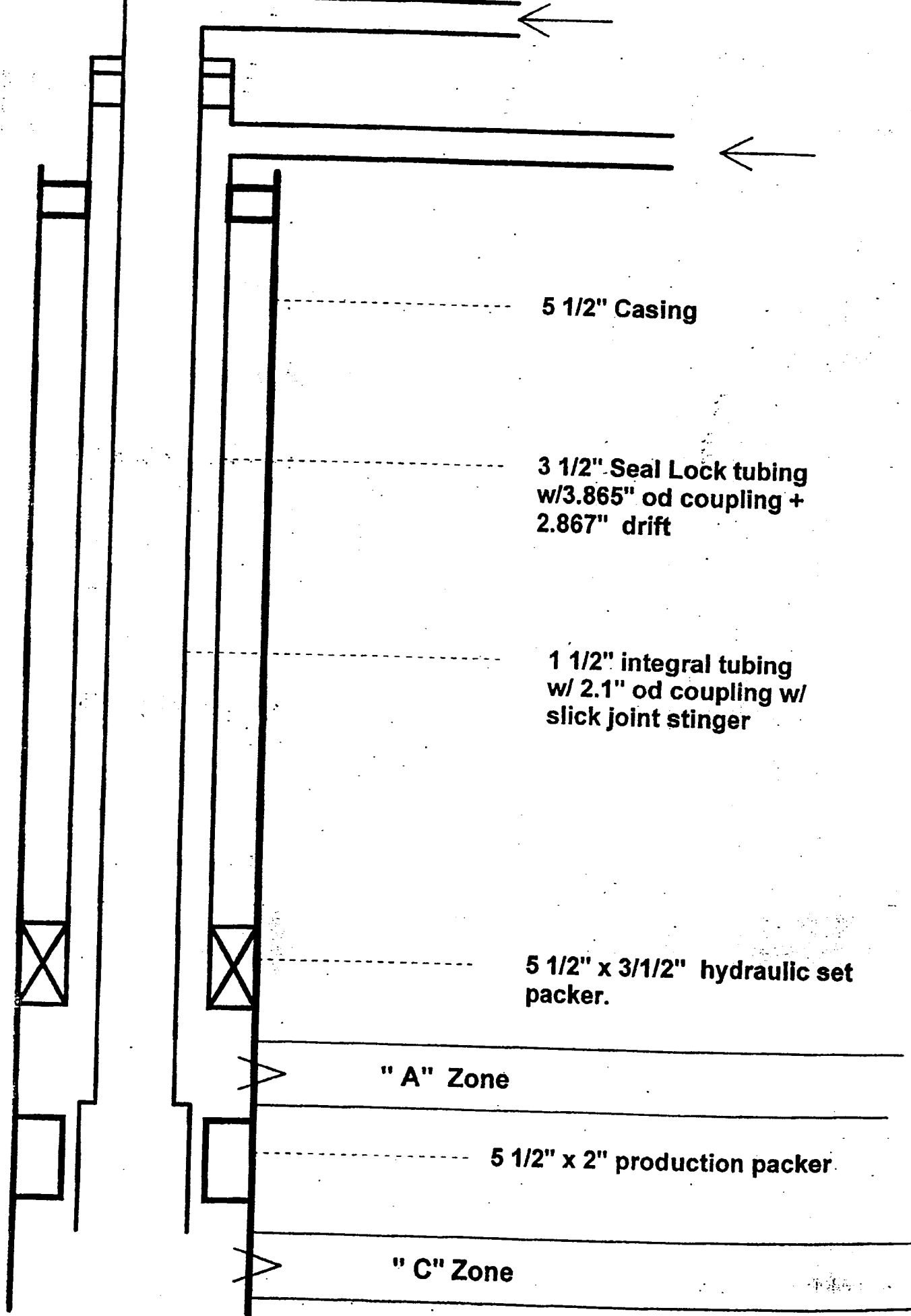
Present Operation:**Details: RU HOWCO STIMULATION SERVICES. SPOTTED 500 GAL 7-1/2% HCL PILL****OVER "C" SHOAL ZONE. POOH W / TBG, CSG SCRAPER & BIT. RU HOWCO WIRELINE****SERVICES. PERFD "C" SHOAL 4798' - 4803' W / 4" CSG GUN W / 4 SPF - TOTAL 17 HOLES.****HOWCO FRACD AS FOLLOWS: PMPD 500 GAL (12 BBLS) 7-1/2% HCL, 8 BBLS @ 2 BPM.****BROKE @ 1770 TO 1500 PSI. PMPD 4 BBLS @ 4 BPM @ 1850 PSI. SD 4 MIN. PRESS BLED****TO 1175 PSI. STARTED FRAC. PMPD 10 BPM @ 1850 PSI. ESTABLISH FRAC RATE OF 19.5****BPM. PMPD FRAC PER HOWCO PROCEDURE. PUT PAD, 1 - 4# / GAL STAGE & 1000****GAL OF 4 - 6# / GAL STAGE. (4.8 - 4.9# / GAL ON FORMATION) AND FRAC SCREENED OUT.****TO SCREEN OUT PMPD 19.5 BPM @ AVG 2100 PSI. WHEN FRAC SCREENED OUT, HAD****10,700# SAND IN FM. 14,300# SAND IN CSG. TOTAL FL PMPD 339.6 BPM. FLOWED BACK****TO TANK UNTIL ACID CAME BACK THEN SWITCHED TO PIT. EST FLOW BACK 29 BBLS****FLUSH, 12 BBLS ACID, 23 BBLS SAND LADENED WTR & 5 BBLS WTR OR TOTAL 69 BBLS.****EST. PRESENT LOAD 270.6 BBLS. EST + - 8300# (630') SAND IN CSG. SWI. SION****Operations Supervisor: IB LUECK**

Pendragon Energy Partners Daily Completion/Workover Report**Well: Federal 9-17****Date: 7/04/03****Section: 17** **Township: 10** **Range: 18** **County: Uintah** **State: Utah****TD:** **PBTD: 4869'** **KB:** **GL:** **Casing Size:** **Wt Range - #Ft.****TOC:** **Perfs:** **Depth:****Present Operation:****Details: FINISH GOING IN HOLE W / 4-3/4" BIT, 5-1/2" CSG SCRAPER & TOTAL OF****161 JTS 2-7/8" 6.5# 8 RD J-55 TBG. FOUND PBTD @ 4869'. NU RIG PUMP & CIRC HOLE****W / 2% KCL WTR. LD ONE JT TBG. BOTTOM OF STRING SAT @ 4824.63'. READY TO****SPOT ACID IN A.M. SION****Operations Supervisor: IB LUECK**

Pendragon Energy Partners Daily Completion/Workover Report**Well: Federal 9-17****Date: 7/03/03****Section: 17****Township: 10****Range: 18****County: Uintah****State: Utah****TD:****PBTD:****KB:****GL:****Casing Size:****Wt Range - #/Ft.****TOG:****Perfs:****Depth:****Present Operation:****Details: RU LEAD ENERGY SERVICES COMPLETION UNIT. NU 5000 PSI BOPS &****WELLHEAD INC. 5000 PSI TBGHEAD. RU HOT OIL TRUCK & TSTD BOPS, TBGHD &****CSG TO 4750 PSI. HELD PRESS FOR 10 MIN. BEGAN PU TBG. APPROX EVERY****5TH JOINT PINS HAD METAL SHAVINGS WHICH EITHER PREVENTED COMPLETE****CONNECTION OR GALLED THE THREAD IN THE COLLAR. HAVE TO WIRE BRUSH &****INSPECT EACH JOINT AND WHEN NECESSARY REMOVE SHAVINGS. HAND & WRENCH****START EACH JOINT. RAN 42 JOINTS. SION****Operations Supervisor: IB LUECK**

ATTACHMENT NO. 12

INJECTION WELLBORE DIAGRAM



5 1/2" Casing

3 1/2" Seal Lock tubing
w/3.865" od coupling +
2.867" drift

1 1/2" integral tubing
w/ 2.1" od coupling w/
slick joint stinger

5 1/2" x 3 1/2" hydraulic set
packer.

" A" Zone

5 1/2" x 2" production packer

" C" Zone

ATTACHMENT # 13

P&A PROCEDURE

P & A PROCEDURE

PENDRAGON ENERGY PARTNERS

FEDERAL 9-17-10-18

752' FEL & 1804' FSL

SECTION 17, T10S - R18E

UINTAH COUNTY, UTAH

TD - 4,784'

Surface Casing: 8 5/8", 24#, 0-315'

Casing : 5 1/2", 15.5# 0' - 250'

Perforations: 4670-4677' A Sand
4800-4800" C Shoal

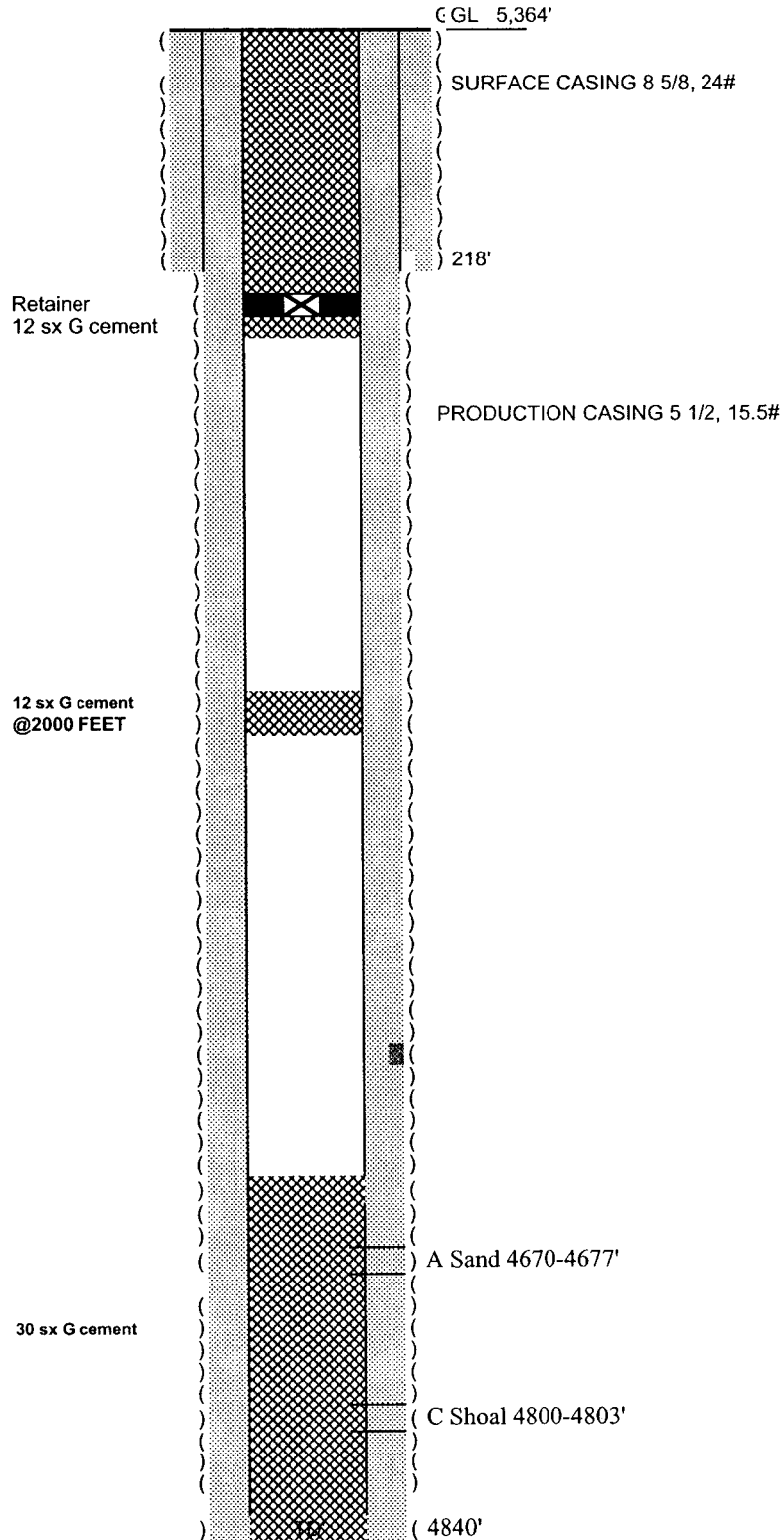
PLUG AND ABANDONMENT PROCEDURE

1. Obtain authorization from regulatory agencies for P&A procedures.
2. Rig up pulling unit. Install BOP. Release packers. Trip out of hole with both strings of tubing.
3. Trip in hole with 2-7/8" tubing and set at 4800'. Establish pump rate, pump and squeeze with 30 sxs Class G cement at 15.8#/gal. This will come to 100' above the top perforations.
4. Raise the tubing to 2000' and pump 12 sx of Class G cement.
5. Set a retainer 20' below surface casing shoe and perforate 10 feet below that shoe. Squeeze 12 sx of Class G cement into the perforations and bring cement back to the surface.
6. Cut off wellhead and install plate and identification P&A post marker. Weld to casing.
7. File reports with the agencies and reclaim surface location.

WELLBORE DIAGRAM

Company: PENDRAGON
Well name: Federal 9-17-10-18
Lease Number: UTU 74407
Location: NESE, Sec.17, T10S
County: Uintah
Date: 11/6/2003

P&A DIAGRAM



ATTACHMENT # 14

MIT PROCEDURE

MECHANICAL INTEGRITY TEST PROCEDURE

The proposed concentric tubing arrangement for water injection is, for the purpose of mechanical integrity testing, identical to a single-zone injector. The Baker Model R packer (or equivalent) set just above the A-Sand provides the isolation of the tubing-casing annulus. Below that packer, there is no isolation required, just as there would not be if the two sets of perforations were being injected into with no separation between them. Integrity of the 3-1/2 inch tubing and casing integrity above the upper packer are the two parameters of importance, and the integrity of the 1-1/2 inch tubing, while of importance to the operator, has no bearing on these parameters.

Integrity testing can be accomplished by pressuring up the annulus between the casing and the 3-1/2 inch tubing. The pressure and duration of test will be as required by the EPA.

Should repair of the 3-1/2 inch tubing be necessary, it can readily be pulled simply by first pulling the 1-1/2 inch tubing and then stinging out of the upper packer with the 3-1/2 inch tubing and coming out just as if it were the only tubing string in the hole.

Should a casing repair be necessary, once the 3-1/2 inch tubing is out of the hole, repairs such as cement squeezing can be accomplished normally after setting a plug in the upper packer and protecting it with 2-3 sacks of sand. The casing can then be re-tested prior to circulating the hole clean and re-running the tubing and/or after it is run, as directed by the EPA.

Test Procedure Details:

- 1) MIRU Service Unit.
- 2) Bleed off pressure, if any, on 1-1/2 inch tubing and 3-1/2 inch tubing.
- 3) ND wellhead & NU BOP.
- 4) Pressure up casing – 3-1/2 inch tubing annulus to 1500 psi for 15 minutes (or per EPA instructions).
- 5) If pressure holds, ND BOP & NU wellhead. Resume injection.
- 6) If pressure does not hold, bleed off pressure & sting out and POOH with 1-1/2 inch tubing.
- 7) Set standing valve in bottom of 3-1/2 inch tubing.
- 8) Pressure up 3-1/2 inch tubing to 1500 psi for 15 minutes (or per EPA instructions).
- 9) If tubing pressure does not hold, retrieve plug and round trip 3-1/2 inch tubing hydrotesting to 4000 psi on each stand.
- 10) Re-run 1-1/2 inch tubing and return well to injection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

999 18th STREET - SUITE 300

DENVER, CO 80202-2466

<http://www.epa.gov/region08>

OCT 25 2004

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Martin W. Buys
Buys & Associates, Inc.
300 East Mineral Ave., Suite 10
Littleton, CO 80122-2631

PENDAGON ENERGY

Re: Underground Injection Control Program
Final Permit for the Federal 9-17 10-18
Uintah County, UT
EPA Permit No. UT20965-06347

Dear Mr. Buys

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed Federal 9-17 10-18, in Uintah County, Utah. A Statement of Basis, which discusses development of the conditions and requirements of the Permit, also is included.

The Public Comment period ended on OCT 07 2004. There were no comments on the Draft Permit received during the Public Notice period, and therefore the Final Permit becomes effective on the date of issuance. All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations (CFR) and are regulations that are in effect on the date that this Permit becomes effective.

Please note that under the terms of the Final Permit, you are authorized only to construct the proposed injection well, and must fulfill the "Prior to Commencing Injection" requirements of the Permit, Part II Section C Subpart 1 and obtain written Authorization to Inject prior to commencing injection. It is your responsibility to be familiar with and to comply with all provisions of the Final Permit.

The Permit and the authorization to inject are issued for the operating life of the well unless terminated (Part III, Section B). The EPA will review this Permit at least every five (5) years to determine whether action under 40 CFR § 144.36(a) is warranted.



Printed on Recycled Paper

If you have any questions on the enclosed Final Permit or Statement of Basis, please call Chuck Williams of my staff at (303) 312-6625, or toll-free at (800) 227- 8917 ext. 6625.

Sincerely,

Carl L Campbell for

Stephen S. Tuber
Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

enclosure: Final Permit
 Final Statement of Basis

cc: Maxine Natchees, Chairperson
 Uintah & Ouray Business Committee
 P.O. Box 190
 Fort Duchesne, UT 84026

Elaine Willie, Environmental Coordinator
Ute Indian Tribe
P.O. Box 460
Fort Duchesne, UT 84026

Mr. William Stringer, Manager
BLM - Vernal Field Office
170 South 500 East
Vernal, UT 84078

Mr. Gilbert Hunt
Technical Services Director
Utah Division of Oil, Gas & Mining
1594 West Temple, Suite 1210
P.O. Box 145801
Salt Lake City, UT 84114

Nathan Wiser
Technical Enforcement Program - UIC
8ENF - UFO



STATEMENT OF BASIS

PENDRAGON ENERGY PARTNERS

**FEDERAL 9-17 10-18
UINTAH COUNTY, UT**

EPA PERMIT NO. UT20965-06347

CONTACT: Chuck Williams
U. S. Environmental Protection Agency
Ground Water Program, 8P-W-GW
999 18th Street, Suite 300
Denver, Colorado 80202-2466
Telephone: 1-800-227-8917 ext. 6625

This STATEMENT OF BASIS gives the derivation of site-specific UIC Permit conditions and reasons for them. Referenced sections and conditions correspond to sections and conditions in the Permit.

UIC Permits specify the conditions and requirements for construction, operation, monitoring and reporting, and plugging of injection wells to prevent the movement of fluids into underground sources of drinking water (USDWs). Under 40 CFR 144 Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General Permit conditions for which content is mandatory and not subject to site-specific differences (40 CFR Parts 144, 146 and 147) are not discussed in this document.

Upon the Effective Date when issued, the Permit authorizes the conversion and operation of a "new" injection well or wells governed by the conditions specified in the Permit. The Permit is issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR 144.39, 144.40 and 144.41. The Permit is subject to EPA review at least once every five (5) years to determine if action is required under 40 CFR 144.36(a).

PART I. General Information and Description of Facility

Pendragon Energy Partners
621 17th Street, Suite 750
Denver, CO 80293

on

December 18, 2003

submitted an application for an Underground Injection Control (UIC) Program Permit for the following injection well or wells:

Federal 9-17 10-18
752 FEL 1804 FSL, NESE S17, T10S, R18E
Uintah County, UT

Regulations specific to Uintah-Ouray Indian Reservation injection wells are found at 40 CFR 147 Subpart TT.

This application is for the conversion of the Federal 9-17 10-18 Green River Formation to an enhanced recovery water injection well. The proposed Federal 9-17 10-18 enhanced oil recovery injection well currently is an inactive Green River "A sand" and "C shoal" oil well. Conversion of this well will support an ongoing water flood enhanced oil recovery project by Pendragon Energy within the Uteland Butte Field using water from an in-field water source well and produced brine. This well will be completed as a dual-injector to enable enhanced recovery pressure maintenance of the A sand and C Shoal separately using nested injection tubing and packers.

The proposed injection zone contains two oil productive sands within the Uteland Butte limestone. The approved injection zone shall be the A Sand and the C Shoal, which occur at depths between approximately 4623' to 4804'. Oil production perforations that will be used for injection in these sands in this well presently exist in the A sand interval and the C Shoal interval. These lenticular sands are encased in impervious black shale and are limited in extent. Production water analyses show the total dissolved solids (TDS) of the water in the proposed injection interval ranges from 29,530 mg/l to 37,511 mg/l TDS. These analyses indicate that in this area, the proposed injection zone is not a USDW.

The well presently is constructed with 8-5/8" surface casing cemented to surface from the casing base at 283' with production casing of 5-1/2" set from TD at 4846' and cemented up to the 114'. The well will be completed for injection purposes with 3-1/2" injection tubing (A sand) set with a packer at approximately 4600', and inside the 3-1/2" tubing will be set an inner (C shoal) 1-1/2" injection tubing. The outer injection tubing packer provides for isolation of the tubing-casing annulus at or below the confining zone and will effectively provide for demonstration of the internal mechanical integrity of the well. The integrity of the inner injection tubing does not need to be tested for EPA purposes. Evaluation of the cement bond log indicates the top of cement occurs at approximately 114' and that intervals of 80% or greater bond index occur through the proposed injection zones and the uppermost confining zone.

The Permit application, including the required information and data necessary to issue a UIC Permit in accordance with 40 CFR Parts 144, 146 and 147, was reviewed by EPA and determined

to be complete.

The Permit will expire upon delegation of primary enforcement responsibility (primacy) for applicable portions of the UIC Program to the Ute Indian Tribe or the State of Utah unless the delegated agency has the authority and chooses to adopt and enforce this Permit as a Tribal or State Permit.

TABLE 1.1 shows the status of the well or wells as "New", "Existing", or "Conversion" and for Existing shows the original date of injection operation. Well authorization "by rule" under 40 CFR Part 144 Subpart C expires automatically on the Effective Date of an issued UIC Permit.

TABLE 1.1		
WELL STATUS / DATE OF OPERATION		
CONVERSION WELLS		
Well Name	Well Status	Date of Operation
Federal 9-17 10-18	Conversion	N/A

Hydrogeologic Setting

Geologic Setting (TABLE 2.1)

The well is located in the Uteland Butte field near the center of the broad, gently northward dipping south flank of the Uinta Basin. The beds dip at about 200'/mile, and there are no known surface folds or faults in the field. The lower 600' to 800' of the Uinta Formation, generally consisting of 5' to 20' thick brown lenticular fluvial sandstone and interbedded varicolored shales, outcrops at the surface in this area. The Uinta is underlain by the Green River Formation which consists of lake (lacustrine) margin sandstones, limestone and shale beds that were deposited along the edges and on the broad level floor of Lake Uintah as it expanded and contracted through time. Several distinct geologic sub-units within the Green River Formation are identified, including the Mahogany Oil Shale, the Douglas Creek, and the Uteland Butte limestone which contains the two proposed injection intervals, the A Sand, and the C Shoal limestone. The C Shoal limestone is the basal unit of the Green River Formation in the Uteland Butte Field. Underlying the Green River Formation is the Wasatch Formation, which is approximately 2400' thick in this area and consists of red alluvial shales and siltstone with scattered lenticular sandstones usually 10' to 50' thick.

TABLE 2.1
GEOLOGIC SETTING
Federal 9-17 10-18

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Uinta	0.00	1,720.00	< 10,000.00	lenticular fluvial sandstones and interbedded varicolored shales
Horse Bench Sand	1,320.00	1,326.00		sandstone
Green River Formation	1,720.00	4,804.00	29,530.00 - 37,511.00	lacustrine shales and marginal lacustrine sands and ostracodal limestones
Mahogany Bench unit (Green River)	1,850.00	1,885.00		Oil shale
Douglas Creek Member (Green River)	3,310.00	3,350.00		sandstone
Uteland Butte Member (Green River)	4,622.00	4,804.00	> 10,000.00	Limestones, lenticular sandstone interbedded with mudstone and shale
Wasatch Formation	4,804.00	5,000.00	> 10,000.00	Mainly lacustrine shale and conglomerate sand

Proposed Injection Zone(s) (TABLE 2.2)

An injection zone is a geological formation, group of formations, or part of a formation that receives fluids through a well. The proposed injection zones are listed in TABLE 2.2.

Injection will occur into an injection zone that is separated from USDWs by the confining zone which is free of known open faults or fractures within the Area of Review.

The proposed injection zone contains two oil productive sands within the Uteland Butte limestone. The approved injection zone shall be the A Sand and the C Shoal, which occur at depths between approximately 4623' to 4804'. The interval between the A sand and the C Shoal is approximately 110' to 120'. Oil production perforations in these sands in this well presently exist in the A sand interval between 4670' to 4677' and in the C Shoal interval between 4800' to 4803'. These sands were deposited as streams meandered across lake margins and flowed northward into the deeper part of the basin. These lenticular sands are encased in impervious black shale, and are limited in extent as evidenced by absence of the A sand in the #7-19 and #2-20 wells.

TABLE 2.2
INJECTION ZONES
Federal 9-17 10-18

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
A sand	4,623.00	4,677.00	29,530.00 - 37,511.00	0.880		N/A
C shoal	4,795.00	4,804.00	10,000.00 - 80,000.00	0.880		N/A

* C - Currently Exempted
E - Previously Exempted
P - Proposed Exemption
N/A - Not Applicable

Confining Zone(s) (TABLE 2.3)

A confining zone is a geological formation, part of a formation, or a group of formations that limits fluid movement above the injection zone. The confining zone or zones are listed in TABLE 2.3.

Impervious layers, predominantly black shales of the lower Green River Formation, begin approximately 45' above the top of the A sand perforations, the uppermost injection interval. These shales are continuous across the entire field and beyond, and will provide effective confining zones for the proposed injection activity.

TABLE 2.3
CONFINING ZONES
Federal 9-17 10-18

Formation Name	Formation Lithology	Top (ft)	Base (ft)
Lower Green River	impervious black shale with thin interbedded tight silty sand	4,548.00	4,623.00

Underground Sources of Drinking Water (USDWs) (TABLE 2.4)

Aquifers or the portions thereof which contain less than 10,000 mg/l total dissolved solids (TDS) and are being or could in the future be used as a source of drinking water are considered to be USDWs. The USDWs in the area of this facility are identified in TABLE 2.4.

According to the application, there are no drinking water wells near the proposed injection well. Production water analyses show the total dissolved solids (TDS) of the water in the proposed injection interval ranges from 29,530 mg/l to 37,511 mg/l TDS. These analyses indicate that in this area, the proposed injection zone is not a USDW. Additional analyses from drill stem tests of two wells within approximately two miles of the proposed well tested water from the Green River Formation at depths between 3676' to 4287' and the total dissolved solids (TDS) ranged from 62,784 to 76,950 mg/l TDS.

TABLE 2.4
UNDERGROUND SOURCES OF DRINKING WATER (USDW)
Federal 9-17 10-18

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)
Uinta Formation	lenticular fluvial sandstones and interbedded varicolored shales	0.00	1,720.00	< 10,000.00

PART III. Well Construction (40 CFR 146.22)

This well will be completed as a dual-injector to enable enhanced recovery pressure maintenance of the A sand and C Shoal separately using nested injection tubing and packers. The well presently is constructed with 8-5/8" surface casing cemented to surface from the casing base at 283'. Production casing of 5-1/2" is set from TD at 4846' and cemented up to 114'. The well will be completed with 3-1/2" injection tubing (A sand) set with a packer at approximately 4600', and inside the 3-1/2" tubing is set an inner (C shoal) 1-1/2" injection tubing set in the production packer set at 4750'.

Evaluation of the cement bond log indicates the top of cement occurs at approximately 117', and that adequate intervals of 80% or greater bond index occur through the proposed injection zones and the uppermost confining zone.

TABLE 3.1
WELL CONSTRUCTION REQUIREMENTS
Federal 9-17 10-18

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
longstring	7.25	5.50	0.00 - 4,846.00	114.00 - 4,846.00
surface	9.50	8.68	0.00 - 283.00	0.00 - 283.00

The approved well completion plan will be incorporated into the Permit as APPENDIX A and will be binding on the Permittee. Modification of the approved plan is allowed under 40 CFR 144.52(a)(1) provided written approval is obtained from the Director prior to actual modification.

Casing and Cementing (TABLE 3.1)

The construction plan for the well or wells proposed for conversion to an injection well was evaluated and determined to be in conformance with standard practices and guidelines that ensure well injection does not result in the movement of fluids into USDWs. Well construction and conversion details for the well or wells are shown in TABLE 3.1.

Tubing and Packer

Injection tubing is required to be installed from a packer up to the surface inside the well casing. The packer will be set above the uppermost perforation. The tubing and packer are designed to prevent injection fluid from coming into contact with the outermost casing.

Tubing-Casing Annulus (TCA)

The TCA allows the casing, tubing and packer to be pressure-tested periodically for mechanical integrity, and will allow for detection of leaks. The TCA will be filled with fresh water treated with a corrosion inhibitor or other fluid approved by the Director.

The tubing/casing annulus must be kept closed at all times so that it can be monitored as required under the conditions of the Permit.

Monitoring Devices

The permittee will be required to install and maintain wellhead equipment allowing for monitoring pressures and providing access for sampling the injected fluid. This equipment includes: 1) shut-off valves located at the wellhead on the injection tubing and on the TCA; 2) a flow meter that measures the cumulative volume of injected fluid; 3) pressure gauges attached to the injection tubing and the TCA to monitor the injection and TCA pressure; and 4) a tap on the injection line, isolated by shut-off valves, for sampling the injected fluid.

All sampling and measurement taken for monitoring must be representative of the monitored activity.

PART IV. Area of Review, Corrective Action Plan (40 CFR 144.55)

TABLE 4.1 lists the wells in the Area of Review ("AOR") and shows the well type, operating status, depth, top of casing cement ("TOC") and whether a Corrective Action Plan ("CAP") is required for the well.

Area Of Review

Applicants for Class I, II (other than "existing" wells) or III injection well Permits are required to identify the location of all known wells within the injection well's Area of Review (AOR) which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the formation, all known wells within the area of review that penetrate formations which may be affected by increased pressure. Under 40 CFR 146.6 the AOR may be a fixed radius of not less than one quarter (1/4) mile or a calculated zone of endangering influence. For Area Permits, a fixed width of not less than one quarter (1/4) mile for the circumscribing area may be used.

Corrective Action Plan

For wells in the AOR which are improperly sealed, completed, or abandoned, the applicant shall develop a Corrective Action Plan (CAP) consisting of the steps or modifications that are necessary to prevent movement of fluid into USDWs.

The CAP will be incorporated into the Permit as APPENDIX F and become binding on the permittee.

TABLE 4.1 lists the wells in the AOR, and shows the well type, operating status, depth, top of casing cement and whether a CAP is required for this well.

PART V. Well Operation Requirements (40 CFR 146.23)

TABLE 5.1
INJECTION ZONE PRESSURES
Federal 9-17 10-18

Formation Name	Depth Used to Calculate MAIP (ft)	Fracture Gradient (psi/ft)	Initial MAIP (psi)
A sand	4,670.00	0.880	2,035
C shoal	4,800.00	0.880	2,090

Approved Injection Fluid

The approved injection fluid is limited to fluids which meet requirements pursuant to 40 CFR § 144.6(b). For disposal wells injecting water brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production, the fluid may be commingled and the well used to inject other Class II wastes such as drilling fluids and spent well completion, treatment and stimulation fluid. Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are not approved.

Initially, the source of water for injection will come from a water well approximately 4000' to be drilled within the field. This part of the Green River Formation yields water about 10,000-80,000 ppm TDS. Once the water fluid is underway, the volume of produced water will increase in the producing wells. The increased produced water will also be used for the flood injection operations.

Injection Pressure Limitation

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

The applicant submitted injection fluid density and injection zone data which was used to calculate a formation fracture pressure and to determine the maximum allowable injection pressure (MAIP), as measured at the surface, for this Permit,

TABLE 5.1 lists the fracture gradient for the injection zone and the approved MAIP, determined according to the following formula:

$$FP = [fg - (0.433 * sg)] * d$$

- FP = formation fracture pressure (measured at surface)
- fg = fracture gradient (from submitted data or tests)
- sg = specific gravity (of injected fluid)
- d = depth to top of injection zone (or top perforation)

Injection Volume Limitation

Cumulative injected fluid volume limits are set to assure that injected fluids remain within the boundary of the exempted area. Cumulative injected fluid volume is limited when injection occurs into an aquifer that has been exempted from protection as a USDW.

Because the injection zone (4623' to 4804') has a Total Dissolved Solids (TDS) in excess of 10,000 mg/l it is not considered an Underground Source of Drinking Water (USDW). For that reason there is no limitation on the amount of authorized fluid that can be injected. There is also no limit on the injection rate as long as the Maximum Allowable Injection Pressure (MAIP) is not exceeded.

Mechanical Integrity (40 CFR 146.8)

An injection well has mechanical integrity if:

1. there is no significant leak in the casing, tubing, or packer (Part I); and
2. there is no significant fluid movement into a USDW through vertical channels adjacent to the injection well bore (Part II).

The Permit prohibits injection into a well which lacks mechanical integrity.

The Permit requires that the well demonstrate mechanical integrity prior to injection and periodically thereafter. A demonstration of mechanical integrity includes both internal (Part I) and external (Part II). The methods and frequency for demonstrating Part I and Part II mechanical integrity are dependant upon well-specific conditions as explained below:

The concentric, nested, arrangement of the injection tubing allows for standard Part I (Internal) Mechanical Integrity testing procedures to be used. The 3-1/2" (outer) A Sand injection tubing packer provides for isolation of the tubing-casing annulus at or below the confining zone and will effectively provide for demonstration of the internal mechanical integrity of the well. The integrity of the inner injection tubing does not need to be tested for EPA purposes.

Part I MI - Internal MI will be demonstrated prior to beginning injection. A successful mechanical integrity test (MIT) will be required at least once every five (5) years. A demonstration of Part I MI is also required prior to resuming injection following any workover operation that affects the casing, tubing, or packer. Part I MI may be demonstrated by a standard tubing-casing annulus pressure test using the maximum permitted injection pressure or 1000 psi, whichever is less, with ten percent or less pressure loss over thirty minutes.

Part II MI - Cement records for this well show that adequate cement was placed in the well. The CBL confirms that this cement meets or exceeds minimum requirements needed to demonstrate zone isolation through the confining zone. The cement bond log for this well shows 120' of 80% or greater bond through the interval from 4550' to 4670'. Therefore, further testing for Part II MI will not be required.

PART VI. Monitoring, Recordkeeping and Reporting Requirements

Injection Well Monitoring Program

At least once a year the permittee must analyze a sample of the injected fluid for total dissolved solids (TDS), specific conductivity, pH, and specific gravity. This analysis shall be reported to EPA annually as part of the Annual Report to the Director. Any time a new source of injected fluid is added, a fluid analysis shall be made of the new source.

Instantaneous injection pressure, injection flow rate, cumulative fluid volume and TCA pressures must be observed on a weekly basis. A recording, at least once every thirty (30) days, must be

made of the injection pressure, injection flow rate and cumulative fluid volume, and the maximum and average value for each must be determined for each month. This information is required to be reported annually as part of the Annual Report to the Director.

PART VII. Plugging and Abandonment Requirements (40 CFR 146.10)

Plugging and Abandonment Plan

Prior to abandonment, the well or wells must be plugged with cement in a manner which will not allow the movement of fluids either into or between USDWs. The plugging and abandonment plan is described in Appendix E of the Permit.

PART VIII. Financial Responsibility (40 CFR 144.52)

Demonstration of Financial Responsibility

The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director. The permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance such as financial statements or other materials acceptable to the Director. The Regional Administrator may, on a periodic basis, require the holder of a lifetime permit to submit a revised estimate of the resources needed to plug and abandon the well to reflect inflation of such costs, and a revised demonstration of financial responsibility if necessary. Initially, the operator has chosen to demonstrate financial responsibility with:

Trust Fund, received July 7, 2004

Evidence of continuing financial responsibility is required to be submitted to the Director annually.



**UNDERGROUND INJECTION CONTROL PROGRAM
PERMIT**

PREPARED: October 2004

Permit No. UT20965-06347

Class II Enhanced Oil Recovery Injection Well

**Federal 9-17 10-18
Uintah County, UT**

Issued To

Pendragon Energy Partners

621 17th Street, Suite 750

Denver, CO 80293

Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

Under the authority of the Safe Drinking Water Act and Underground Injection Control (UIC) Program regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR) Parts 2, 124, 144, 146, and 147, and according to the terms of this Permit,

Pendragon Energy Partners
621 17th Street, Suite 750
Denver, CO 80293

is authorized to construct and to operate the following Class II injection well or wells:

Federal 9-17 10-18
752 FEL 1804 FSL, NESE S17, T10S, R18E
Uintah County, UT

Permit requirements herein are based on regulations found in 40 CFR Parts 124, 144, 146, and 147 which are in effect on the Effective Date of this Permit.

This Permit is based on representations made by the applicant and on other information contained in the Administrative Record. Misrepresentation of information or failure to fully disclose all relevant information may be cause for termination, revocation and reissuance, or modification of this Permit and/or formal enforcement action. This Permit will be reviewed periodically to determine whether action under 40 CFR 144.36(a) is required.

This Permit is issued for the life of the well or wells unless modified, revoked and reissued, or terminated under 40 CFR 144.39 or 144.40. This Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for this program is delegated to an Indian Tribe or a State. Upon the effective date of delegation, all reports, notifications, questions and other compliance actions shall be directed to the Indian tribe or State Program Director or designee.

Issue Date: OCT 25 2004

Effective Date OCT 25 2004



Stephen S. Tuber
Assistant Regional Administrator*
Office of Partnerships and Regulatory Assistance

*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.

PART II. SPECIFIC PERMIT CONDITIONS

Section A. WELL CONSTRUCTION REQUIREMENTS

These requirements represent the approved minimum construction standards for well casing and cement, injection tubing, and packer.

Details of the approved well construction plan are incorporated into this Permit as APPENDIX A. Changes to the approved plan that may occur during construction must be approved by the Director prior to being physically incorporated.

1. Casing and Cement.

The well or wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The well casing and cement shall be designed for the life expectancy of the well and of the grade and size shown in APPENDIX A. Remedial cementing may be required if shown to be inadequate by cement bond log or other attempted demonstration of Part II (External) mechanical integrity.

2. Injection Tubing and Packer.

Injection tubing is required, and shall be run and set with a packer at or below the depth indicated in APPENDIX A. The packer setting depth may be changed provided it remains below the depth indicated in APPENDIX A and the Permittee provides notice and obtains the Director's approval for the change.

3. Sampling and Monitoring Devices.

The Permittee shall install and maintain in good operating condition:

- (a) a "tap" at a conveniently accessible location on the injection flow line between the pump house or storage tanks and the injection well, isolated by shut-off valves, for collection of representative samples of the injected fluid; and
- (b) one-half (1/2) inch female iron pipe fitting, isolated by shut-off valves and located at the wellhead at a conveniently accessible location, for the attachment of a pressure gauge capable of monitoring pressures ranging from normal operating pressures up to the Maximum Allowable Injection Pressure specified in APPENDIX C:
 - (i) on the injection tubing; and
 - (ii) on the tubing-casing annulus (TCA); and
- (c) a pressure actuated shut-off device attached to the injection flow line set to shut-off the injection pump when or before the Maximum Allowable Injection Pressure specified in APPENDIX C is reached at the wellhead; and
- (d) a non-resettable cumulative volume recorder attached to the injection line.

4. Well Logging and Testing

Well logging and testing requirements are found in APPENDIX B. The Permittee shall ensure the log and test requirements are performed within the time frames specified in APPENDIX B. Well logs and tests shall be performed according to current EPA-approved procedures. Well log and test results shall be submitted to the Director within sixty (60) days of completion of the logging or testing activity, and shall include a report describing the methods used during logging or testing and an interpretation of the test or log results.

5. Postponement of Construction or Conversion

The Permittee shall complete well construction within one year of the Effective Date of the Permit, or in the case of an Area Permit within one year of authorization of the additional well. Authorization to construct and operate shall expire if the well has not been constructed within one year of the Effective Date of the Permit or authorization and the Permit may be terminated under 40 CFR 144.40, unless the Permittee has notified the Director and requested an extension prior to expiration. Notification shall be in writing, and shall state the reasons for the delay and provide an estimated completion date. Once Authorization has expired under this part, the complete permit process including opportunity for public comment may be required before Authorization to construct and operate can be reissued.

6. Workovers and Alterations

Workovers and alterations shall meet all conditions of the Permit. Prior to beginning any addition or physical alteration to an injection well that may significantly affect the tubing, packer or casing, the Permittee shall give advance notice to the Director and obtain the Director's approval. The Permittee shall record all changes to well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workover, logging, or test data to EPA within sixty (60) days of completion of the activity.

A successful demonstration of Part I MI is required following the completion of any well workover or alteration which affects the casing, tubing, or packer. Injection operations shall not be resumed until the well has successfully demonstrated mechanical integrity and the Director has provided written approval to resume injection.

Section B. MECHANICAL INTEGRITY

The Permittee is required to ensure each injection well maintains mechanical integrity at all times. The Director, by written notice, may require the Permittee to comply with a schedule describing when mechanical integrity demonstrations shall be made.

An injection well has mechanical integrity if:

- (a) There is no significant leak in the casing, tubing, or packer (Part I); and
- (b) There is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore (Part II).

1. Demonstration of Mechanical Integrity (MI).

The operator shall demonstrate MI prior to commencing injection and periodically thereafter. Well-specific conditions dictate the methods and the frequency for demonstrating MI and are discussed in the Statement of Basis. The logs and tests are designed to demonstrate both internal (Part I) and external (Part II) MI as described above. The conditions present at this well site warrant the methods and frequency required in Appendix B of this Permit.

In addition to these regularly scheduled demonstrations of MI, the operator shall demonstrate internal (Part I) MI after any workover which affects the tubing, packer or casing.

The Director may require additional or alternative tests if the results presented by the operator are not satisfactory to the Director to demonstrate there is no movement of fluid into or between USDWs resulting from injection activity. Results of MI tests shall be submitted to the Director as soon as possible but no later than sixty (60) days after the test is complete.

2. Mechanical Integrity Test Methods and Criteria

EPA-approved methods shall be used to demonstrate mechanical integrity. A current copy of Ground Water Section Guidance No. 34 "Cement Bond Logging Techniques and Interpretation", Ground Water Section Guidance No. 37, "Demonstrating Part II (External) Mechanical Integrity for a Class II injection well permit", and Ground Water Section Guidance No. 39, "Pressure Testing Injection Wells for Part I (Internal) Mechanical Integrity" are provided at issuance of this Permit.

The Director may stipulate specific test methods and criteria best suited for a specific well construction and injection operation.

3. Notification Prior to Testing.

The Permittee shall notify the Director at least 30 days prior to any scheduled mechanical integrity test. The Director may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity test. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.

4. Loss of Mechanical Integrity.

If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc.), the Permittee shall notify the Director within 24 hours (see Part III Section E Paragraph 11(e) of this Permit), and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in.

Within five days, the Permittee shall submit a follow-up written report that documents test results, repairs undertaken or a proposed remedial action plan.

Injection operations shall not be resumed until after the well has successfully been repaired and demonstrated mechanical integrity, and the Director has provided approval to resume injection.

Section C. WELL OPERATION

INJECTION BETWEEN THE OUTERMOST CASING PROTECTING UNDERGROUND SOURCES OF DRINKING WATER AND THE WELL BORE IS PROHIBITED.

Injection is approved under the following conditions:

1. Requirements Prior to Commencing Injection.

Injection operation may commence only after all construction and pre-injection requirements herein have been met and approved. Except for new wells authorized by an Area Permit under 40 CFR 144.33 (c), the Permittee may not commence injection until construction is complete, and

- (a) The Permittee has submitted to the Director a notice of completion of construction and a completed EPA Form 7520-12; all applicable logging and testing requirements of this Permit (see APPENDIX B) have been fulfilled and the records submitted to the Director; mechanical integrity pursuant to 40 CFR 146.8 and Part II Section B of this Permit has been demonstrated; and
 - (i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the Permit; or
 - (ii) The Permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in Paragraph 1a, in which case prior inspection or review is waived and the Permittee may commence injection.

2. Injection Interval.

Injection is permitted only within the approved injection interval, listed in APPENDIX C. Additional individual injection perforations may be added provided that they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6.

3. Injection Pressure Limitation

- (a) The permitted Maximum Allowable Injection Pressure (MAIP), measured at the wellhead, is found in APPENDIX C. Injection pressure shall not exceed the amount the Director determines is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to USDWs. In no case shall injection pressure cause the movement of injected or formation fluids into a USDW.
- (b) The Permittee may request a change of the MAIP, or the MAIP may be increased or decreased by the Director in order to ensure that the requirements in Paragraph (a) above are fulfilled. The Permittee may be required to conduct a step rate injection test or other suitable test to provide information for determining the fracture pressure of the injection zone. Change of the permitted MAIP by the Director shall be by modification of this Permit and APPENDIX C.

4. Injection Volume Limitation.

Injection volume is limited to the total volume specified in APPENDIX C.

5. Injection Fluid Limitation.

Injected fluids are limited to those identified in 40 CFR 144.6(b)(2) as fluids used for enhanced recovery of oil or natural gas, including those which are brought to the surface in connection with conventional oil or natural gas production that may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are NOT approved for injection. This well is NOT approved for commercial brine injection, industrial waste fluid disposal or injection of hazardous waste as defined by CFR 40 Part 261. The Permittee shall provide a listing of the sources of injected fluids in accordance with the reporting requirements in Part II Section D Paragraph 4 and APPENDIX D of this Permit.

6. Tubing-Casing Annulus (TCA)

The tubing-casing annulus (TCA) shall be filled with water treated with a corrosion inhibitor, or other fluid approved by the Director. The TCA valve shall remain closed during normal operating conditions and the TCA pressure shall be maintained at zero (0) psi.

If TCA pressure cannot be maintained at zero (0) psi, the Permittee shall follow the procedures in Ground Water Section Guidance No. 35 "Procedures to follow when excessive annular pressure is observed on a well."

Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS

1. Monitoring Parameters, Frequency, Records and Reports.

Monitoring parameters are specified in APPENDIX D. Pressure monitoring recordings shall be taken at the wellhead. The listed parameters are to be monitored, recorded and reported at the frequency indicated in APPENDIX D even during periods when the well is not operating.

Monitoring records must include:

- (a) the date, time, exact place and the results of the observation, sampling, measurement, or analysis, and;
- (b) the name of the individual(s) who performed the observation, sampling, measurement, or analysis, and;
- (c) the analytical techniques or methods used for analysis.

2. Monitoring Methods.

- (a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.

- (b) Methods used to monitor the nature of the injected fluids must comply with analytical methods cited and described in Table 1 of 40 CFR 136.3 or Appendix III of 40 CFR 261, or by other methods that have been approved in writing by the Director.
- (c) Injection pressure, annulus pressure, injection rate, and cumulative injected volumes shall be observed and recorded at the wellhead under normal operating conditions, and all parameters shall be observed simultaneously to provide a clear depiction of well operation.
- (d) Pressures are to be measured in pounds per square inch (psi).
- (e) Fluid volumes are to be measured in standard oil field barrels (bbl).
- (f) Fluid rates are to be measured in barrels per day (bbl/day).

3. Records Retention.

- (a) Records of calibration and maintenance, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a period of AT LEAST THREE (3) YEARS from the date of the sample, measurement, report, or application. This period may be extended anytime prior to its expiration by request of the Director.
- (b) Records of the nature and composition of all injected fluids must be retained until three (3) years after the completion of any plugging and abandonment (P&A) procedures specified under 40 CFR 144.52(a)(6) or under Part 146 Subpart G, as appropriate. The Director may require the Permittee to deliver the records to the Director at the conclusion of the retention period. The Permittee shall continue to retain the records after the three (3) year retention period unless the Permittee delivers the records to the Director or obtains written approval from the Director to discard the records.
- (c) The Permittee shall retain records at the location designated in APPENDIX D.

4. Annual Reports.

Whether the well is operating or not, the Permittee shall submit an Annual Report to the Director that summarizes the results of the monitoring required by Part II Section D and APPENDIX D.

The first Annual Report shall cover the period from the effective date of the Permit through December 31 of that year. Subsequent Annual Reports shall cover the period from January 1 through December 31 of the reporting year. Annual Reports shall be submitted by February 15 of the year following data collection. EPA Form 7520-11 may be copied and shall be used to submit the Annual Report, however, the monitoring requirements specified in this Permit are mandatory even if EPA Form 7520-11 indicates otherwise.

Section E. PLUGGING AND ABANDONMENT

1. Notification of Well Abandonment, Conversion or Closure.

The Permittee shall notify the Director in writing at least forty-five (45) days prior to: 1) plugging and abandoning an injection well, 2) converting to a non-injection well, and 3) in the case of an Area Permit, before closure of the project.

2. Well Plugging Requirements

Prior to abandonment, the injection well shall be plugged with cement in a manner which prevents the movement of fluids into or between underground sources of drinking water. Prior to placement of the cement plug(s) the well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Director. The well shall be plugged in accordance with the approved plugging and abandonment plan and with 40 CFR 146.10.

3. Approved Plugging and Abandonment Plan.

The approved plugging and abandonment plan is incorporated into this Permit as APPENDIX E. Changes to the approved plugging and abandonment plan must be approved by the Director prior to beginning plugging operations. The Director also may require revision of the approved plugging and abandonment plan at any time prior to plugging the well.

4. Forty Five (45) Day Notice of Plugging and Abandonment.

The Permittee shall notify the Director at least forty-five (45) days prior to plugging and abandoning a well and provide notice of any anticipated change to the approved plugging and abandonment plan.

5. Plugging and Abandonment Report.

Within sixty (60) days after plugging a well, the Permittee shall submit a report (EPA Form 7520-13) to the Director. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

- (a) A statement that the well was plugged in accordance with the approved plugging and abandonment plan; or
- (b) Where actual plugging differed from the approved plugging and abandonment plan, an updated version of the plan, on the form supplied by the Director, specifying the differences.

6. Inactive Wells.

After any period of two years during which there is no injection the Permittee shall plug and abandon the well in accordance with Part II Section E Paragraph 2 of this Permit unless the Permittee:

- (a) Provides written notice to the Director;
- (b) Describes the actions or procedures the Permittee will take to ensure that the well will not endanger USDWs during the period of inactivity. These actions and procedures shall include compliance with mechanical integrity demonstration, Financial Responsibility and all other permit requirements designed to protect USDWs; and

- (c) Receives written notice by the Director temporarily waiving plugging and abandonment requirements.

PART III. CONDITIONS APPLICABLE TO ALL PERMITS

Section A. EFFECT OF PERMIT

The Permittee is allowed to engage in underground injection in accordance with the conditions of this Permit. The Permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR 142 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized by this Permit or by rule is prohibited. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations. Nothing in this Permit relieves the Permittee of any duties under applicable regulations.

Section B. CHANGES TO PERMIT CONDITIONS

1. Modification, Reissuance, or Termination.

The Director may, for cause or upon a request from the Permittee, modify, revoke and reissue, or terminate this Permit in accordance with 40 CFR 124.5, 144.12, 144.39, and 144.40. Also, this Permit is subject to minor modification for causes as specified in 40 CFR 144.41. The filing of a request for modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any condition of this Permit.

2. Conversions.

The Director may, for cause or upon a written request from the Permittee, allow conversion of the well from a Class II injection well to a non-Class II well. Conversion may not proceed until the Permittee receives written approval from the Director. Conditions of such conversion may include but are not limited to, approval of the proposed well rework, follow up demonstration of mechanical integrity, well-specific monitoring and reporting following the conversion, and demonstration of practical use of the converted configuration.

3. Transfer of Permit.

Under 40 CFR 144.38, this Permit is transferable provided the current Permittee notifies the Director at least thirty (30) days in advance of the proposed transfer date (EPA Form 7520-7) and provides a written agreement between the existing and new Permittees containing a specific date for transfer of Permit responsibility, coverage and liability between them. The notice shall adequately demonstrate that the financial responsibility requirements of 40 CFR 144.52(a)(7) will be met by the new Permittee. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act; in some cases, modification or revocation and reissuance is mandatory.

4. Permittee Change of Address.

Upon the Permittee's change of address, or whenever the operator changes the address where monitoring records are kept, the Permittee must provide written notice to the Director within 30 days.

5. Construction Changes, Workovers, Logging and Testing Data

The Permittee shall give advance notice to the Director, and shall obtain the Director's written approval prior to any physical alterations or additions to the permitted facility. Alterations or workovers shall meet all conditions as set forth in this permit. The Permittee shall record any changes to the well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workovers, logging, or test data to EPA within sixty (60) days of completion of the activity.

Following the completion of any well workovers or alterations which affect the casing, tubing, or packer, a successful demonstration of mechanical integrity (Part III, Section F of this permit) shall be made, and written authorization from the Director received, prior to resuming injection activities.

Section C. SEVERABILITY

The Provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

Section D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and 40 CFR 144.5, information submitted to EPA pursuant to this Permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the Permittee, and
- information which deals with the existence, absence or level of contaminants in drinking water.

Section E. GENERAL PERMIT REQUIREMENTS

1. Duty to Comply.

The Permittee must comply with all conditions of this Permit. Any noncompliance constitutes a violation of the Safe Drinking Water Act (SDWA) and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the Permittee need not comply with the provisions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 CFR 144.34. All violations of the SDWA may subject the Permittee to penalties and/or criminal prosecution as specified in Section 1423 of the SDWA.

2. Duty to Reapply.

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, under 40 CFR 144.37 the Permittee must apply for a new permit prior to the expiration date.

3. Need to Halt or Reduce Activity Not a Defense.

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

4. Duty to Mitigate.

The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Permit.

5. Proper Operation and Maintenance.

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit.

6. Permit Actions.

This Permit may be modified, revoked and reissued or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. Property Rights.

This Permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information.

The Permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. The Permittee is required to submit any information required by this Permit or by the Director to the mailing address designated in writing by the Director.

9. Inspection and Entry.

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,
- (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

10. Signatory Requirements.

All applications, reports or other information submitted to the Director shall be signed and certified according to 40 CFR 144.32. This section explains the requirements for persons duly authorized to sign documents, and provides wording for required certification.

11. Reporting Requirements.

- (a) **Planned changes.** The Permittee shall give notice to the Director as soon as possible of any planned changes, physical alterations or additions to the permitted facility, and prior to commencing such changes.
- (b) **Anticipated noncompliance.** The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) **Monitoring Reports.** Monitoring results shall be reported at the intervals specified in this Permit.
- (d) **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 30 days following each schedule date.
- (e) **Twenty-four hour reporting.** The Permittee shall report to the Director any noncompliance which may endanger human health or the environment, including:
 - (i) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; or
 - (ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

Information shall be provided, either directly or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning (800) 227-8917 and requesting EPA Region VIII UIC Program Compliance and Technical Enforcement Director, or by contacting the EPA Region VIII Emergency Operations Center at (303) 293-1788.

In addition, a follow up written report shall be provided to the Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- (f) Oil Spill and Chemical Release Reporting: The Permittee shall comply with all reporting requirements related to the occurrence of oil spills and chemical releases by contacting the National Response Center (NRC) at (800) 424-8802, (202) 267-2675, or through the NRC website <http://www.nrc.uscg.mil/index.htm>.
- (g) Other Noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs Part III, Section E Paragraph 11(b) or Section E, Paragraph 11(e) at the time the monitoring reports are submitted. The reports shall contain the information listed in Paragraph 11(e) of this Section.
- (h) Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information to the Director.

Section F. FINANCIAL RESPONSIBILITY

1. Method of Providing Financial Responsibility.

The Permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). No substitution of a demonstration of financial responsibility shall become effective until the Permittee receives written notification from the Director that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect changes in such costs and may require the Permittee to provide a revised demonstration of financial responsibility.

2. Insolvency.

In the event of:

- (a) the bankruptcy of the trustee or issuing institution of the financial mechanism; or
- (b) suspension or revocation of the authority of the trustee institution to act as trustee; or

- (c) the institution issuing the financial mechanism losing its authority to issue such an instrument

the Permittee must notify the Director in writing, within ten (10) business days, and the Permittee must establish other financial assurance or liability coverage acceptable to the Director within sixty (60) days after any event specified in (a), (b), or (c) above.

The Permittee must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor, if named as debtor of a corporate guarantee, must make such a notification as required under the terms of the guarantee.

APPENDIX A

WELL CONSTRUCTION REQUIREMENTS

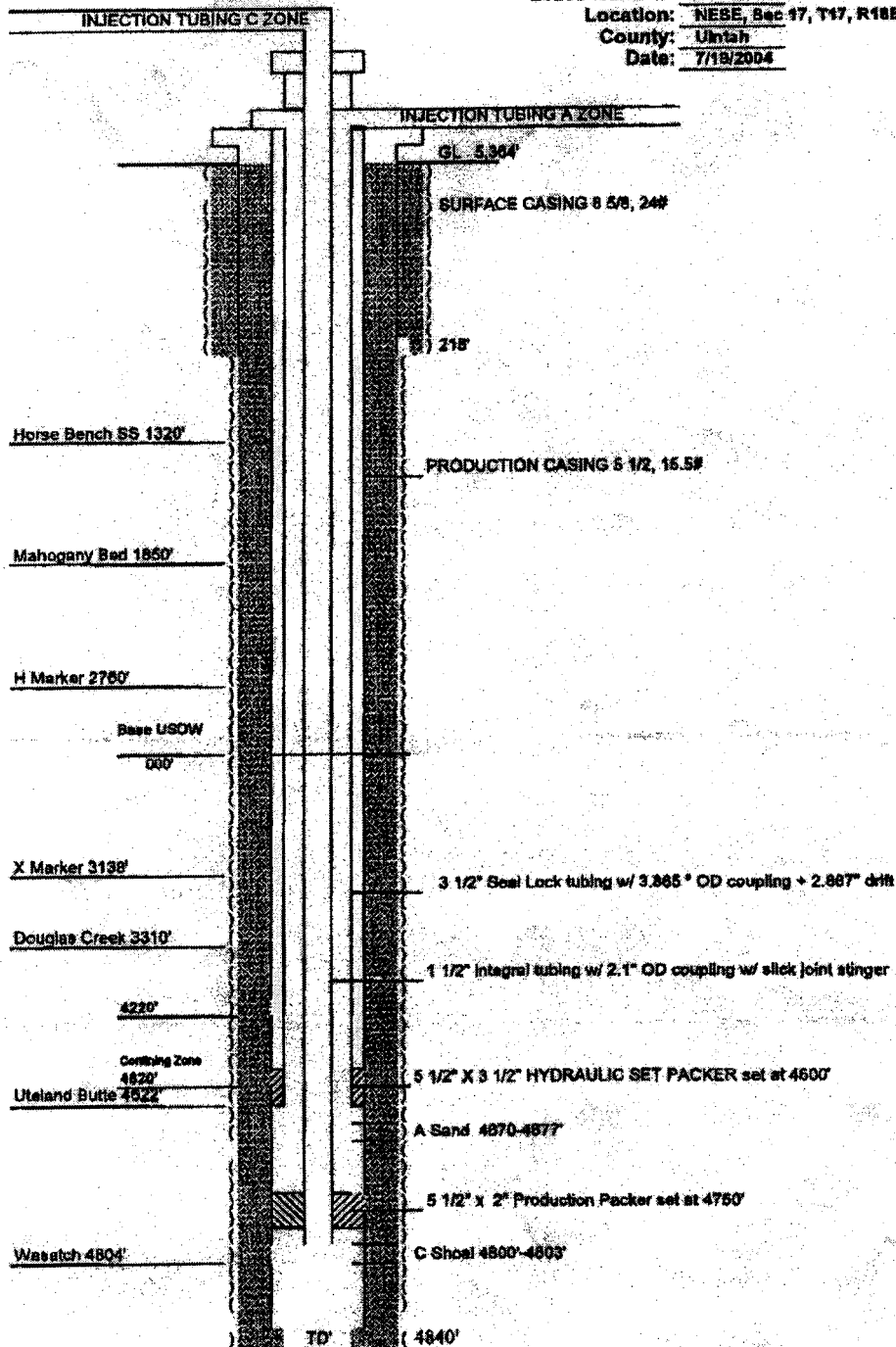
This well will be completed as a dual-injector to enable enhanced recovery pressure maintenance of the A sand and C Shoal separately using nested injection tubing and packers.

The well presently is constructed with 8-5/8" surface casing cemented to surface from the casing base at 283'. Production casing of 5-1/2" is set from TD at 4846' and cemented up to 114'.

The well will be completed with 3-1/2" injection tubing (A-Sand) set with a packer at approximately 4600', and inside the 3-1/2" tubing is set an inner (C Shoal) 1-1/2" injection tubing set in the production packer set at 4750'.

WELLBORE DIAGRAM**INJECTION WELLBORE DIAGRAM**

Company: **PENDRAGON**
 Well name: **FEDERAL 9-17-10-18**
 Lease Number: **UTU 74407**
 Location: **NESE, Sec 17, T17, R18E**
 County: **Utah**
 Date: **7/19/2004**



UT20965-06347

UT20965 Fed 9-17 constr.bmp

APPENDIX B

LOGGING AND TESTING REQUIREMENTS

Logs.

Logs will be conducted according to current UIC guidance. It is the responsibility of the permittee to obtain and use guidance prior to conducting any well logging required as a condition of this permit.

NO LOGGING REQUIREMENTS

Tests.

Tests will be conducted according to current UIC guidance. It is the responsibility of the permittee to obtain and use guidance prior to conducting any well test required as a condition of this permit.

WELL NAME: Federal 9-17 10-18	
TYPE OF TEST	DATE DUE
Standard Annulus Pressure	at least once every five years
Standard Annulus Pressure	prior to injection
Pore Pressure	prior to injection

APPENDIX C

OPERATING REQUIREMENTS

MAXIMUM ALLOWABLE INJECTION PRESSURE:

Maximum Allowable Injection Pressure (MAIP) as measured at the surface shall not exceed the pressure(s) listed below.

WELL NAME	MAXIMUM ALLOWED INJECTION PRESSURE (psi)	
	ZONE 1 (Upper)	ZONE 2 (Lower)
Federal 9-17 10-18	2,035	2,070

INJECTION INTERVAL(S):

Injection is permitted only within the approved injection interval listed below. Injection perforations may be altered provided they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6. Specific injection perforations can be found in Appendix A.

WELL NAME: Federal 9-17 10-18			
FORMATION NAME	APPROVED INJECTION INTERVAL (KB, ft)		FRACTURE GRADIENT (psi/ft)
	TOP	BOTTOM	
A sand	4,623.00 - 4,677.00		0.880
C shoal	4,795.00 - 4,804.00		0.880

ANNULUS PRESSURE:

The annulus pressure shall be maintained at zero (0) psi as measured at the wellhead. If this pressure cannot be maintained, the Permittee shall follow the procedures listed under Part II, Section C. 6. of this permit.

MAXIMUM INJECTION VOLUME:

There is no limitation on the number of barrels per day (bbls/day) of water that shall be injected into this well, provided further that in no case shall injection pressure exceed that limit shown in Appendix C.

APPENDIX D

MONITORING AND REPORTING PARAMETERS

This is a listing of the parameters required to be observed, recorded, and reported. Refer to the permit Part II, Section D, for detailed requirements for observing, recording, and reporting these parameters.

OBSERVE MONTHLY AND RECORD AT LEAST ONCE EVERY THIRTY DAYS	
OBSERVE AND RECORD	Injection pressure (psig)
	Annulus pressure(s) (psig)
	Injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbls)

ANNUALLY	
ANALYZE	Injected fluid total dissolved solids (mg/l)
	Injected fluid specific gravity
	Injected fluid specific conductivity
	Injected fluid pH

ANNUALLY	
REPORT	Each month's maximum and averaged injection pressures (psig)
	Each month's maximum and averaged annulus pressure(s) (psig)
	Each month's averaged injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbl)
	Written results of annual injected fluid analysis
	Sources of all fluids injected during the year

Records of all monitoring activities must be retained and made available for inspection at the following location:

Pendragon Energy Partners, Inc
621 17th Street
Denver, CO 80202

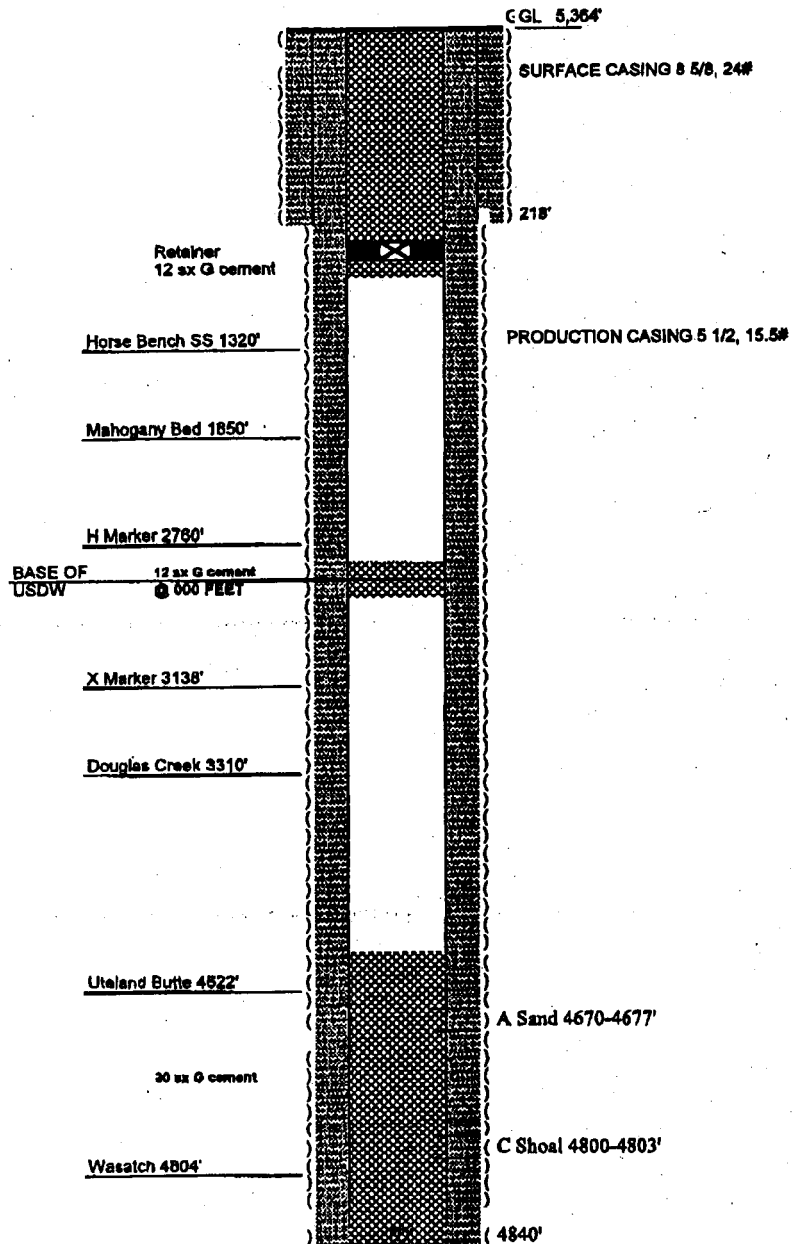
APPENDIX E

PLUGGING AND ABANDONMENT REQUIREMENTS

plugging gel of a density of at least 9.6 ppg shall be placed between all cement plugs

WELLBORE DIAGRAM

Company: PENDRAGON
Well name: Federal 9-17-10-18
Lease Number: UTU 74407
Location: NE8E, Sec.17, T10S
County: Utah
Date: 7/19/2004

P&A DIAGRAM

UT20965-06347

UT20965 Fed 9-17 P-A.bmp

APPENDIX F

CORRECTIVE ACTION REQUIREMENTS

no corrective action is required

FORM 6

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM

Operator: PENDRAGON ENERGY PARTNERS, INC.
Address: 621 17 TH STREET, STE. 750
DENVER
CO 80293

Operator Account Number: N 2965
Phone Number: (303) 296-9402

Well 1

API Number	Well Name	QQ	Sec	Twp	Rng	County
047-33244	FEDERAL #7-19-10-18	SWNE	19	10S	18E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date		
E	13853	14366		11/4/04		
Comments: EFFECTIVE 9/1/04 PART OF UTELAND BUTTE WATERFLOOD <i>Secondary Recovery Unit (GREV) eff 9/1/04</i>						

Well 2

API Number	Well Name	QQ	Sec	Twp	Rng	County
047-34760	FREDERAL #7-30-10-18	SWNE	30	10S	18E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date		
E	13731	14366		11/4/04		
Comments: EFFECTIVE 9/1/04 PART OF UTELAND BUTTE WATERFLOOD <i>GREV eff 9/1/04</i>						

Well 3

API Number	Well Name	QQ	Sec	Twp	Rng	County
047-34135	FEDERAL #9-17-10-18	NESE	17	10S	18E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date		
E	13732	14366		11/4/04		
Comments: EFFECTIVE 9/1/04 PART OF UTELAND BUTTE WATERFLOOD <i>GREV eff 9/1/04</i>						

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

JANEEN FRITTS

Name (Please Print)

Signature

ADMIN SECY

Title

Date

RECEIVED

NOV 04 2004

DIV. OF OIL & GAS



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

999 18TH STREET- SUITE 300

DENVER, CO 80202-2466

Phone 800-227-8917

<http://www.epa.gov/region08>

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

JAN 21 2005

Martin W. Buys
Buys & Associates, Inc.
300 E. Mineral Ave., Suite 10
Littleton, CO 80122-2631

PENDRAGON

43-047-34135

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

Re: **AUTHORIZATION TO INJECT**
Federal 9-17-18-10
Uintah County, UT
EPA Permit No. UT20965-06347

Dear Mr. Buys:

Thank you for submitting to the Region 8 Ground Water Program Office of the Environmental Protection Agency (EPA) the information pertaining to completion/conversion of the Federal 9-17-10-18 enhanced recovery injection well, UIC Permit UT20965-06347. On November 30, 2004, we received your letter submitting Mechanical Integrity Test results. On January 12, 2005 we received your letter submitting a well completion record EPA Form 7520-12 and wellbore schematic. Conditions of your Permit required submittal of the following information:

- (a) Well Rework Record Form 7520-12 and a schematic showing cementing records and details of the well as constructed or converted;
- (b) demonstration of Part I (Internal) mechanical integrity, no significant leak in the casing, tubing, or packer; and
- (c) completion of any corrective action requirement to the satisfaction of the Director.

Conditions specified in your Permit have been met and information submitted, and the results have been reviewed and approved by the EPA. Therefore, effective upon your receipt of this letter, **Administrative approval hereby is granted for water injection into the Federal 9-17-18-10 Well under the conditions of EPA Permit No. UT20965-06347 as issued.**

As of this approval, responsibility for Permit compliance and enforcement is transferred to the Region 8 UIC Technical Enforcement Program office. Therefore, please direct all future notification, reporting, monitoring and compliance correspondence to the following address, referencing your well and UIC Permit number on all correspondence regarding this well.

U.S. Environmental Protection Agency Region 8
UIC Technical Enforcement Program, 8ENF-UFO
999 18th Street, Suite 300
Denver, Colorado 80202-2466

The Director has determined that the maximum allowable surface injection pressure (MAIP) for the Federal 9-17-18-10 shall not exceed 2035 psig in the upper or "A sand" interval, or 2070 psig in the lower or "C shoal" interval. Please be reminded of the Monitoring, Record keeping and Reporting Requirements of your Permit and that it is your responsibility to be aware of and to comply with all conditions of the Permit.

If you have any questions regarding notification, testing, monitoring, reporting or other Permit requirements, the UIC Technical Enforcement Program may be reached by calling (800) 227-8917.

Sincerely,



Sandra A. Stavnes
Director
Ground Water Program

cc: Maxine Natchees, Chairperson
Uintah and Ouray Business Committee
PO Box 190
Fort Duchesne, Utah 84026

Elaine Willie
Environmental Coordinator
Ute Indian Tribe
PO Box 460
Fort Duchesne, Utah 84026

Mr. William Stringer, Manager
U.S. Bureau of Land Management Vernal Field Office
170 South 500 East
Vernal, Utah 84078

Mr. Henry Maddux, Field Supervisor
U.S. Fish and Wildlife Service Utah Field Office
2369 West Orton Circle
West Valley City, Utah 84119

Mr. Gilbert Hunt
Technical Services Director
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114

Nathan Wiser, 8ENF-UFO



UIC FORM

105 18E 17

DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

UIC FORM 2 (Part 1)

MONTHLY REPORT OF ENHANCED RECOVERY PROJECT

Operator: PENDRAGON ENERGY PARTNERS, INC.
Address: 621 17TH STREET, STE. #750
city DENVER
state CO zip 80293

Page 1 of 2
Report Period: Apr-2005
Phone Number: (303) 296-9402
Amended Report ☐ (highlight changes)

Field or Unit Name UTELAND BUTTE (LOWER GREEN RIVER) UNIT	Formation GREEN RIVER
Type of Project SECONDARY RECOVERY	County / Counties UINTAH
Number of Active Injection Wells at the End of Report Period	2

INJECTED VOLUMES	Current Month	Cumulative
Water (barrels)	11,822	11,822
Gas (MCF)	0	0
Other _____	0	0

PRODUCED VOLUMES	Current Month	Cumulative
Oil (barrels)		
Gas (MCF)		
Water (barrels)		
Other _____		

IMPORTANT: Report monthly monitoring of individual wells on Part 2 of this form or on equivalent form in accordance with current Utah Oil and Gas Conservation General Rules. Attach additional pages as necessary.

I hereby certify that this report is true and complete to the best of my knowledge.

Name (Please Print) ALAN B. NICOL Title PRESIDENT
Signature  Date 05/10/2005

Comments:

RECEIVED

MAY 12 2005

DIV. OF OIL, GAS & MINING

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

ROUTING

1. DJJ
2. CDW

X - Change of Operator (Well Sold)

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective:

12/15/2009

FROM: (Old Operator): N2965-Pendragon Energy Partners, Inc. 468 South Reed St. Lakewood, CO 80226 Phone: 1 (303) 296-9402	TO: (New Operator): N5085-Questar E&P Company 1050 17th St, Suite 500 Denver, CO 80265 Phone: 1 (303) 672-6900
--	---

CA No.

Unit:

UTELAND BUTTE (GRRV)

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED LIST								

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 12/24/2009
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 12/24/2009
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 1/20/2010
- a. Is the new operator registered in the State of Utah: Business Number: 764611-0143
- a. (R649-9-2) Waste Management Plan has been received on: IN PLACE
- b. Inspections of LA PA state/fee well sites complete on: 1/12/2010 ok per DJJ
- c. Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM not yet BIA
- Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: not yet
- Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
- Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 1/12/2010

DATA ENTRY:

- Changes entered in the **Oil and Gas Database** on: 1/20/2010
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 1/20/2010
- Bond information entered in RBDMS on: 1/20/2010
- Fee/State wells attached to bond in RBDMS on: 1/20/2010
- Injection Projects to new operator in RBDMS on: 1/20/2010
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

BOND VERIFICATION:

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: n/a
- a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965003033
- b. The **FORMER** operator has requested a release of liability from their bond on: not yet

LEASE INTEREST OWNER NOTIFICATION:

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

COMMENTS:

Pendragon (N2965) to Questar Exploration Production (N5085)

DESERT SPRINGS 20-1	20	100S	180E	4304732052	14366	FEDERAL	OW	S	UTU-74836
DESERT SPRING 3-29-10-18	29	100S	180E	4304733162	14366	FEDERAL	OW	P	U-74836
DESERT SPRING 16-19-10-18	19	100S	180E	4304733164	14366	FEDERAL	OW	P	U-74408
FEDERAL 7-19-10-18	19	100S	180E	4304733244	14366	FEDERAL	WS	A	UTU74408
FEDERAL 5-20-10-18	20	100S	180E	4304733245	14366	FEDERAL	WI	A	UTU74836
FEDERAL 14-17-10-18	17	100S	180E	4304733712	14366	FEDERAL	OW	S	UTU74407
FED 2-20-10-18	20	100S	180E	4304734134	14366	FEDERAL	OW	P	UTU-0182660-A
FED 9-17-10-18	17	100S	180E	4304734135	14366	FEDERAL	WI	A	UTU-77407
DESERT SPRING 7-30-10-18	30	100S	180E	4304734760	14366	FEDERAL	OW	S	U74408
STATE 1-16-10-18	16	100S	180E	4304733807	14366	STATE	OW	P	ML-45175
STATE 3-16-10-18	16	100S	180E	4304734766	14366	STATE	OW	P	ML 45175
STATE 11-16-10-18	16	100S	180E	4304734767	14366	STATE	OW	P	ML 45175

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL ☐ GAS WELL ☐ OTHER Water Injection Well

2. NAME OF OPERATOR:
Questar Exploration & Production Company N5085

3. ADDRESS OF OPERATOR:
1050 17th Street Suite 500 CITY Denver STATE CO ZIP 80265

PHONE NUMBER:
(303) 672-6900

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1804' FSL, 752' FEL

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 17 10S 18E S

STATE: UTAH

5. LEASE DESIGNATION AND SERIAL NUMBER:
U-74407

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

8. WELL NAME and NUMBER:
Fed 9-17-10-18

9. API NUMBER:
4304734135

10. FIELD AND POOL, OR WILDCAT:
Uteland Butte

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective 12/15/09 Questar Exploration & Production Company was appointed operator of this well and agrees to be responsible under the terms and conditions of the lease for all oil and gas operations conducted on this lease. Bond coverage is provided by our bond # 965-003-769.

Alan B. Nicol 12/15/09
Date
President
Pendragon Energy Partners, Inc. N2965
468 South Reed Street
Lakewood, CO 80226
(303) 296-9402

Jay Neese 12-15-2009
Date
Executive Vice President
Questar Exploration and Production Company
1050 17th Street, Suite 500
Denver, CO 80265

NAME (PLEASE PRINT) Chad Matney

TITLE Landman

SIGNATURE [Signature]

DATE 12-15-2009

(This space for State use only)

RECEIVED

DEC 24 2009

DIV. OF OIL, GAS & MINING

(5/2000)

APPROVED 01/20/2010

(See Instructions on Reverse Side)

Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING


UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

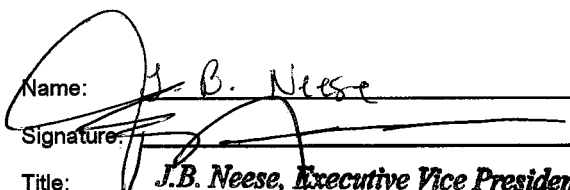
Well Name and Number Federal 9-17-10-18	API Number 4304734135
Location of Well Footage: 1804' FSL, 752' FeL County: Uintah QQ, Section, Township, Range: NESE 17 10S 18E State: UTAH	Field or Unit Name Uteland Butte (LGR) Unit Lease Designation and Number U-74407

EFFECTIVE DATE OF TRANSFER: 12/15/2009

CURRENT OPERATOR

Company: Pendragon Energy Partners, Inc. Name: Alan B. Nicol
Address: 468 South Reed Street
city Lakewood state Co zip 80226 Signature: 
Phone: (303) 296-9402 Title: President
Date: 12/29/2009
Comments:

NEW OPERATOR

Company: Questar Exploration & Production Company Name: J.B. Neese
Address: 1050 17th Street # 500
city Denver state Co zip 80265 Signature: 
Phone: (303) 308-3048 Title: J.B. Neese, Executive Vice President
Date: 1-11-2010
Comments:

(This space for State use only)

Transfer approved by: _____ Approval Date: _____
Title: _____

Comments:

EPA Approved Well for Injection
D. Janis 1-12-10

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

RECEIVED

JAN 11 2010

DIV. OF OIL, GAS & MINING

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET (for state use only)

ROUTING
CDW

Change of Operator (Well Sold)

X - Operator Name Change

The operator of the well(s) listed below has changed, effective:

6/14/2010

FROM: (Old Operator): N5085-Questar Exploration and Production Company 1050 17th St, Suite 500 Denver, CO 80265 Phone: 1 (303) 308-3048	TO: (New Operator): N3700-QEP Energy Company 1050 17th St, Suite 500 Denver, CO 80265 Phone: 1 (303) 308-3048
--	--

CA No.

Unit:

UTELAND BUTTE (GRRV)

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
FEDERAL 7-19-10-18	19	100S	180E	4304733244	14366	Federal	WS	A
FEDERAL 5-20-10-18	20	100S	180E	4304733245	14366	Federal	WI	A
FED 9-17-10-18	17	100S	180E	4304734135	14366	Federal	WI	A

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/28/2010
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/28/2010
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 6/24/2010
- 4a. Is the new operator registered in the State of Utah: Business Number: 764611-0143
- 5a. (R649-9-2) Waste Management Plan has been received on: Requested
- 5b. Inspections of LA PA state/fee well sites complete on: n/a
- 5c. Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 8/16/2010 BIA not yet
- Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: 8/16/2010
- Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
- Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to **Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 6/29/2010

DATA ENTRY:

- Changes entered in the **Oil and Gas Database** on: 6/30/2010
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 6/30/2010
- Bond information entered in RBDMS on: 6/30/2010
- Fee/State wells attached to bond in RBDMS on: 6/30/2010
- Injection Projects to new operator in RBDMS on: 6/30/2010
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

BOND VERIFICATION:

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: 965010693
- 3a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965010695
- 3b. The **FORMER** operator has requested a release of liability from their bond on: n/a

LEASE INTEREST OWNER NOTIFICATION:

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

COMMENTS:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: See attached
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: See attached
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME: See attached
2. NAME OF OPERATOR: Questar Exploration and Production Company N5085		8. WELL NAME and NUMBER: See attached
3. ADDRESS OF OPERATOR: 1050 17th Street, Suite 500 City: Denver STATE: CO ZIP: 80265		9. API NUMBER: Attached
4. LOCATION OF WELL FOOTAGES AT SURFACE: See attached		10. FIELD AND POOL, OR WILDCAT: See attached
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		COUNTY: Attached STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT <small>(Submit in Duplicate)</small> Approximate date work will start: <u>6/14/2010</u>	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION (START/RESUME) <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUT-OFF <input checked="" type="checkbox"/> OTHER: <u>Operator Name Change</u>
<input type="checkbox"/> SUBSEQUENT REPORT <small>(Submit Original Form Only)</small> Date of work completion: _____			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective June 14, 2010 Questar Exploration and Production Company changed its name to QEP Energy Company. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:

Federal Bond Number: 965002976 (BLM Reference No. ESB000024)

Utah State Bond Number: ~~965003033~~

Fee Land Bond Number: ~~965003033~~

BIA Bond Number: ~~799446~~ **965010693**

N3700

965010695

The attached document is an all inclusive list of the wells operated by Questar Exploration and Production Company. As of June 14, 2010 QEP Energy Company assumes all rights, duties and obligations as operator of the properties as described on the list

NAME (PLEASE PRINT) <u>Morgan Anderson</u>	TITLE <u>Regulatory Affairs Analyst</u>
SIGNATURE <u>Morgan Anderson</u>	DATE <u>6/23/2010</u>

(This space for State use only)

RECEIVED

JUN 28 2010

DIV. OF OIL, GAS & MINING

(See Instructions on Reverse Side)

APPROVED 6/30/2009
Earlene Russell
 Division of Oil, Gas and Mining
 Earlene Russell, Engineering Technician



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155
<http://www.blm.gov/ut/st/en.html>



IN REPLY REFER TO:
3100
(UT-922)

JUL 28 2010

Memorandum

To: Vernal Field Office, Price Field Office, Moab Field Office

From: Chief, Branch of Minerals

Roger L. Bankert

Subject: Name Change Recognized

Attached is a copy of the Certificate of Name Change issued by the Texas Secretary of State and a decision letter recognizing the name change from the Eastern States Office. We have updated our records to reflect the name change in the attached list of leases.

The name change from **Questar Exploration and Production Company** into **QEP Energy Company** is effective June 8, 2010.

cc: MMS
UDOGM

RECEIVED

AUG 16 2010

DIV. OF OIL, GAS & MIN. (DOWM)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

UIC FORM 5

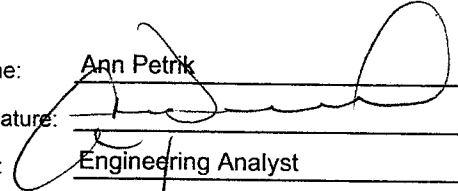
TRANSFER OF AUTHORITY TO INJECT

Well Name and Number See Attached List	API Number Attached
Location of Well Footage : Attached	Field or Unit Name Attached
County : QQ, Section, Township, Range:	Lease Designation and Number Attached
State : UTAH	

EFFECTIVE DATE OF TRANSFER: 6/14/2010

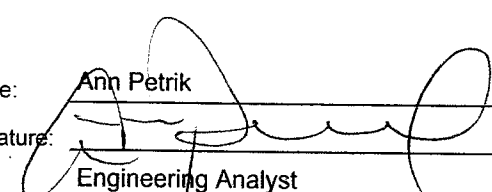
CURRENT OPERATOR

Company: Questar Exploration and Production Company
Address: 1050 17th Street, Suite 500
city Denver state CO zip 80265
Phone: (303) 672-6900
Comments:

Name: Ann Petrik
Signature: 
Title: Engineering Analyst
Date: 6/28/2010

NEW OPERATOR

Company: QEP Energy Company
Address: 1050 17th Street, Suite 500
city Denver state CO zip 80265
Phone: (303) 672-6900
Comments:

Name: Ann Petrik
Signature: 
Title: Engineering Analyst
Date: 6/28/2010

(This space for State use only)

Transfer approved by: _____

Approval Date: _____

Title: _____

Comments:

Accepted by the
Utah Division of
Oil, Gas and Mining

Date: 6/29/10
By: D. Jones

EPA approved well

RECEIVED

JUN 28 2010



QEP Energy Company

Independence Plaza
1050 17th Street, Suite 500
Denver, CO 80265
Tel: 303.672.6900
Fax: 303.294.9632

November 11, 2014

U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

Attn: Don Breffle

RE: Mechanical Integrity Test (MIT)
Federal 9-17-10-18
UIC# UT20965-06347
API# 43-047-34135
Location: Sec. 17, T10S, R18E, Uintah County, UT

Dear Mr. Breffle:

Please be advised that the above captioned well passed a successful Mechanical Integrity Test (MIT) on November 6, 2014. Enclosed please find a Pressure Test Chart and a Casing or Annulus Pressure Test form recorded from the test. The MIT for this well was a regularly scheduled test.

If you have any additional questions or concerns, please don't hesitate to contact me at (303) 260-6745 or via email at laura.abrams@qepres.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'Laura Abrams', written over a horizontal line.

Laura Abrams
Sr. Regulatory Affairs Analyst

RECEIVED
NOV 14 2014
DIV. OF OIL, GAS & MINING

Enclosures: MIT Casing or Annulus Pressure Test Form
MIT Results Spreadsheet with Pressure Test Chart

cc: Utah Division of Oil Gas and Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, UT 84114-5801

Bureau of Land Management
Vernal Field Office
170 South 500 East
Vernal, UT 84078

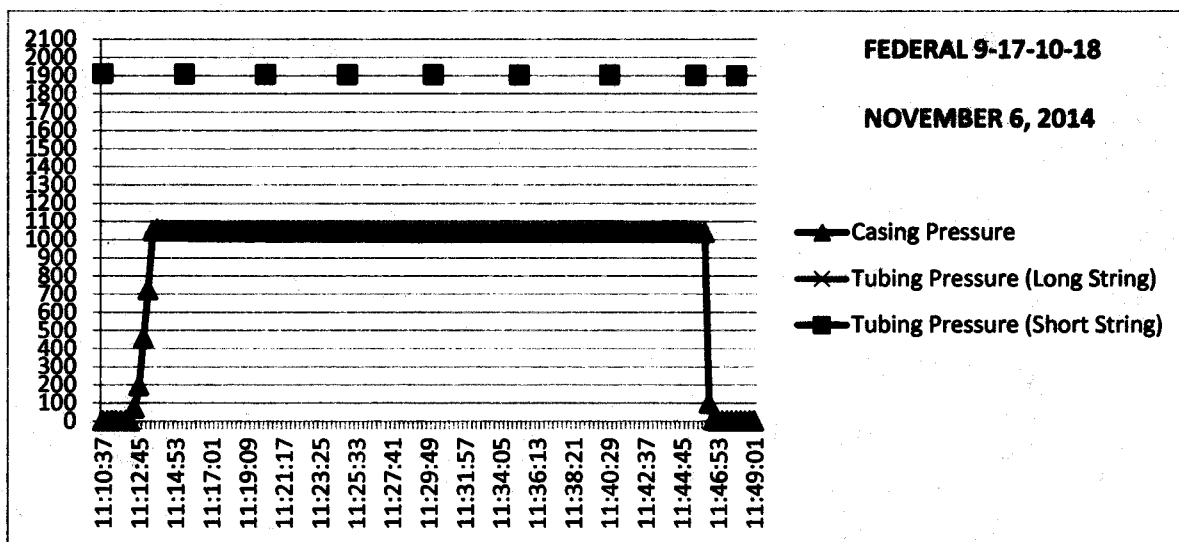
3000 PSIG

Date	Time	Casing Pressure	Tubing Pressure (Long String)	Tubing Pressure (Short String)	Temp
11/6/2014	11:10:37	0	1912	1911	55
11/6/2014	11:10:53	0			55
11/6/2014	11:11:09	0			55
11/6/2014	11:11:25	0			55
11/6/2014	11:11:41	0			55
11/6/2014	11:11:57	0			55
11/6/2014	11:12:13	0			55
11/6/2014	11:12:29	70.95			55
11/6/2014	11:12:45	194.11			55
11/6/2014	11:13:01	459.5			55
11/6/2014	11:13:17	723.8			55
11/6/2014	11:13:33	1045.3			55
11/6/2014	11:13:49	1057.3			55
11/6/2014	11:14:05	1052.1			55
11/6/2014	11:14:21	1049.6			55
11/6/2014	11:14:37	1048.4			55
11/6/2014	11:14:53	1047.6			55
11/6/2014	11:15:09	1047			55
11/6/2014	11:15:25	1046.4	1908	1908	55
11/6/2014	11:15:41	1045.9			55
11/6/2014	11:15:57	1045.6			55
11/6/2014	11:16:13	1045.2			55
11/6/2014	11:16:29	1044.8			55
11/6/2014	11:16:45	1044.5			55
11/6/2014	11:17:01	1044.2			55
11/6/2014	11:17:17	1044			55
11/6/2014	11:17:33	1043.7			55
11/6/2014	11:17:49	1043.4			55
11/6/2014	11:18:05	1043.3			55
11/6/2014	11:18:21	1043.1			53
11/6/2014	11:18:37	1042.9			53
11/6/2014	11:18:53	1042.7			53
11/6/2014	11:19:09	1042.6			53
11/6/2014	11:19:25	1042.5			53
11/6/2014	11:19:41	1042.3			53
11/6/2014	11:19:57	1042.1			53
11/6/2014	11:20:13	1042	1906	1905	53
11/6/2014	11:20:29	1041.9			53
11/6/2014	11:20:45	1041.8			53
11/6/2014	11:21:01	1041.6			53

Date	Time	Casing Pressure	Tubing Pressure (Long String)	Tubing Pressure (Short String)	Temp
11/6/2014	11:21:17	1041.5			53
11/6/2014	11:21:33	1041.5			53
11/6/2014	11:21:49	1041.4			53
11/6/2014	11:22:05	1041.2			53
11/6/2014	11:22:21	1041.2			53
11/6/2014	11:22:37	1041.1			53
11/6/2014	11:22:53	1041			53
11/6/2014	11:23:09	1040.9			53
11/6/2014	11:23:25	1040.8			53
11/6/2014	11:23:41	1040.8			53
11/6/2014	11:23:57	1040.7			53
11/6/2014	11:24:13	1040.6			53
11/6/2014	11:24:29	1040.5			53
11/6/2014	11:24:45	1040.5			53
11/6/2014	11:25:01	1040.5	1905	1904	53
11/6/2014	11:25:17	1040.4			53
11/6/2014	11:25:33	1040.3			53
11/6/2014	11:25:49	1040.3			53
11/6/2014	11:26:05	1040.3			53
11/6/2014	11:26:21	1040.2			53
11/6/2014	11:26:37	1040.1			53
11/6/2014	11:26:53	1040.1			53
11/6/2014	11:27:09	1040.1			53
11/6/2014	11:27:25	1040			53
11/6/2014	11:27:41	1039.9			53
11/6/2014	11:27:57	1039.9			53
11/6/2014	11:28:13	1039.9			53
11/6/2014	11:28:29	1039.9			53
11/6/2014	11:28:45	1039.8			53
11/6/2014	11:29:01	1039.7			53
11/6/2014	11:29:17	1039.7			51
11/6/2014	11:29:33	1039.7			51
11/6/2014	11:29:49	1039.7			51
11/6/2014	11:30:05	1039.6	1904	1903	51
11/6/2014	11:30:21	1039.6			51
11/6/2014	11:30:37	1039.6			51
11/6/2014	11:30:53	1039.5			51
11/6/2014	11:31:09	1039.4			51
11/6/2014	11:31:25	1039.5			51
11/6/2014	11:31:41	1039.4			51
11/6/2014	11:31:57	1039.4			51
11/6/2014	11:32:13	1039.3			51

Date	Time	Casing Pressure	Tubing Pressure (Long String)	Tubing Pressure (Short String)	Temp
11/6/2014	11:32:29	1039.3			51
11/6/2014	11:32:45	1039.3			51
11/6/2014	11:33:01	1039.3			51
11/6/2014	11:33:17	1039.2			51
11/6/2014	11:33:33	1039.2			51
11/6/2014	11:33:49	1039.2			51
11/6/2014	11:34:05	1039.2			51
11/6/2014	11:34:21	1039.1			51
11/6/2014	11:34:37	1039.1			51
11/6/2014	11:34:53	1039.1			51
11/6/2014	11:35:09	1039.1	1903.9	1902	51
11/6/2014	11:35:25	1039			51
11/6/2014	11:35:41	1039			51
11/6/2014	11:35:57	1039			51
11/6/2014	11:36:13	1039			51
11/6/2014	11:36:29	1039			51
11/6/2014	11:36:45	1038.9			51
11/6/2014	11:37:01	1038.9			51
11/6/2014	11:37:17	1038.9			51
11/6/2014	11:37:33	1039			51
11/6/2014	11:37:49	1038.8			51
11/6/2014	11:38:05	1038.8			51
11/6/2014	11:38:21	1038.8			51
11/6/2014	11:38:37	1038.8			51
11/6/2014	11:38:53	1038.8			51
11/6/2014	11:39:09	1038.7			51
11/6/2014	11:39:25	1038.7			51
11/6/2014	11:39:41	1038.8			51
11/6/2014	11:39:57	1038.7			51
11/6/2014	11:40:13	1038.7			51
11/6/2014	11:40:29	1038.7	1903	1902	51
11/6/2014	11:40:45	1038.7			51
11/6/2014	11:41:01	1038.7			51
11/6/2014	11:41:17	1038.6			51
11/6/2014	11:41:33	1038.6			51
11/6/2014	11:41:49	1038.7			51
11/6/2014	11:42:05	1038.6			51
11/6/2014	11:42:21	1038.5			51
11/6/2014	11:42:37	1038.5			51
11/6/2014	11:42:53	1038.6			51
11/6/2014	11:43:09	1038.6			51
11/6/2014	11:43:25	1038.6			51

Date	Time	Casing Pressure	Tubing Pressure (Long String)	Tubing Pressure (Short String)	Temp
11/6/2014	11:43:41	1038.5			51
11/6/2014	11:43:57	1038.6			51
11/6/2014	11:44:13	1038.5			51
11/6/2014	11:44:29	1038.5			51
11/6/2014	11:44:45	1038.5			51
11/6/2014	11:45:01	1038.5			51
11/6/2014	11:45:17	1038.5			51
11/6/2014	11:45:33	1038.5	1902	1901	50
11/6/2014	11:45:49	1038.4			50
11/6/2014	11:46:05	1038.4			50
11/6/2014	11:46:21	97.66			50
11/6/2014	11:46:37	6.429			50
11/6/2014	11:46:53	0			50
11/6/2014	11:47:09	0			50
11/6/2014	11:47:25	0			50
11/6/2014	11:47:41	0			50
11/6/2014	11:47:57	0	1899	1898	50
11/6/2014	11:48:13	0			51
11/6/2014	11:48:29	0			51
11/6/2014	11:48:45	0			51
11/6/2014	11:49:01	0			51



MECHANICAL INTEGRITY TEST CASING OR ANNULUS PRESSURE TEST

U.S. ENVIRONMENTAL PROTECTION AGENCY
UNDERGROUND INJECTION CONTROL PROGRAM, UIC IMPLEMENTATION SECTION (8P-W-GW)
999 18TH STREET, SUITE 300, DENVER, CO. 80202-2466

EPA WITNESS: NONE DATE: 11/6/2014 TIME: 11:00 ☒ AM ☐ PM

TEST CONDUCTED BY: TONY JENNE QEP ENERGY COMPANY

OTHERS PRESENT: SCOTT EBELING K&E HOT OIL
API NUMBER 43-047-34135 EPA ID NUMBER- UT 20965-06347

WELL NAME: <u>FEDERAL 9-17-10-18</u>		TYPE: <input checked="" type="checkbox"/> ER <input type="checkbox"/> SWD	STATUS: <input checked="" type="checkbox"/> AC <input type="checkbox"/> TA <input type="checkbox"/> UC
FIELD: <u>PENDRAGON</u>		LEASE: <u>UTU 74407</u>	
		UNIT: <u>UTU 81306X</u>	
WELL LOCATION: <u>NE/4, SE/4, SEC. 17, T10</u> <input type="checkbox"/> N <input checked="" type="checkbox"/> S <u>R 18</u> <input type="checkbox"/> E <input type="checkbox"/> W		COUNTY: <u>UINTAH</u> STATE: <u>UTAH</u>	
OPERATOR: <u>QEP ENERGY COMPANY</u>			
LAST MIT: <u>11/28/2009</u>		MAXIMUM ALLOWABLE PRESSURE: <u>2035</u> PSIG	

IS THIS A REGULAR SCHEDULED TEST? ☒ YES ☐ NO

INITIAL TEST FOR PERMIT? ☐ YES ☒ NO

TEST AFTER WELL WORK? ☐ YES ☒ NO

WELL INJECTING DURING TEST? ☒ YES ☐ NO IF YES, RATE: 146 BPD

PRE-TEST CASING/TUBING ANNULUS PRESSURE: 0 PSIG

MIT DATA TABLE TUBING	TEST #1 PRESSURE	TEST #2	TEST #3
--------------------------	---------------------	---------	---------

INITIAL PRESSURE	<u>1912</u> PSIG	<u>1911</u> PSIG	<u>PSIG</u>
END OF TEST PRESSURE	<u>1899</u> PSIG	<u>1898</u> PSIG	<u>PSIG</u>

CASING/TUBING	ANNULUS	TUBING (LONG STRING)	TUBING (SHORT STRING)
0 MINUTES	<u>1046.4</u> PSIG	<u>1908</u> PSIG	<u>1908</u> PSIG
5 MINUTES	<u>1042</u> PSIG	<u>1906</u> PSIG	<u>1905</u> PSIG
10 MINUTES	<u>1040.5</u> PSIG	<u>1905</u> PSIG	<u>1904</u> PSIG
15 MINUTES	<u>1039.6</u> PSIG	<u>1904</u> PSIG	<u>1903</u> PSIG
20 MINUTES	<u>1039.1</u> PSIG	<u>1903.9</u> PSIG	<u>1902</u> PSIG
25 MINUTES	<u>1038.7</u> PSIG	<u>1903</u> PSIG	<u>1902</u> PSIG
30 MINUTES	<u>1038.5</u> PSIG	<u>1902</u> PSIG	<u>1901</u> PSIG
MINUTES	<u>PSIG</u>	<u>PSIG</u>	<u>PSIG</u>
MINUTES	<u>PSIG</u>	<u>PSIG</u>	<u>PSIG</u>
RESULT	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL

DOES THE ANNULUS PRESSURE BUILD BACK UP AFTER THE TEST? ☐ YES ☒ NO